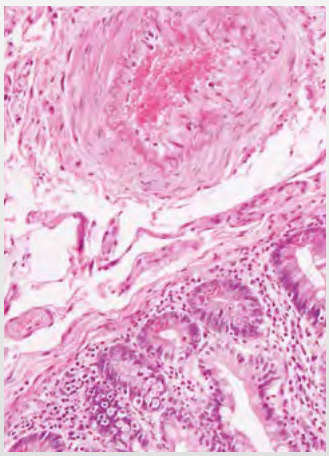
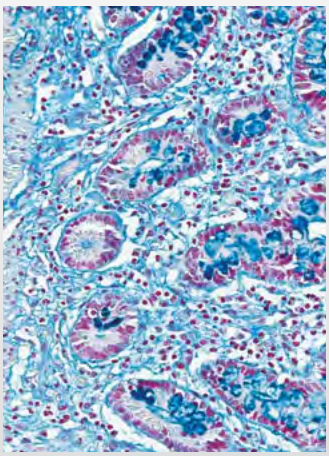
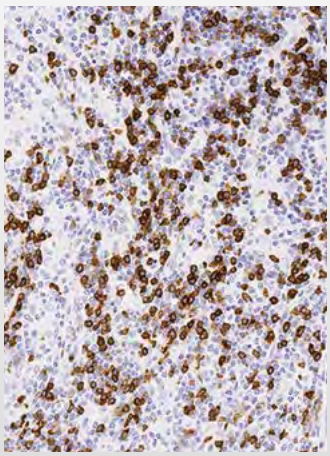
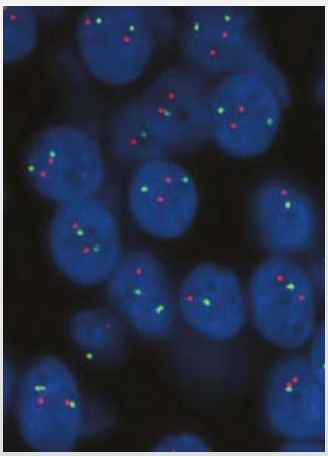
2016

# Catalog | Products & Services

Dako

**Agilent** Pathology Solutions


Agilent Technologies

## How to contact Dako

Dako Never Sleeps.

# Ready When You Are.

Online Shopping at www.Dako.com*

- Convenient 24/7/365 ordering on your schedule
- Exceptional Customer Service Team
- Log in and register today

*Accessible in North America

**To place an order:**

**Tel: 800 235 5763, Option 1**
**Fax: 800 566 3256**
**e-mail: customer.service@dako.com**

Phone lines are open Monday through Friday
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Voice mail is available 24 hours a day.
Calls will be returned during normal business hours.
Fax line is open 24 hours a day.
Orders will be processed and confirmed during normal business hours.
Hardcopy orders required for order $10k or greater on non-credit card payment orders.

**For technical assistance:**

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**www.dako.com**

**ColorGraphics General Statement**

This catalog was printed by an environmentally sustainable printer with Chain-of Custody certification under the Forest Stewardship Council (FSC) and the Sustainable Forestry Initiative (SFI) with provisional status in the Sustainable Green Partnership (SGP) pending full certification. Environmental improvement and conservation were integrated into the printing process by the use of recycling processes and environmentally sustainable or eco-certified materials having low VOC levels and/or an aqueous or high vegetable-based content.

For your convenience, write your Dako customer account number(s) below:

# Dear Valued Customer,

Agilent is committed to the fight against cancer. Leveraging our tremendous strength within pathology, genomics and companion diagnostics enables us to serve you, our pathology customers, with a full breadth of workflow solutions for routine diagnostics. At the same time, we are in a unique position to accelerate the adoption of new groundbreaking technologies from a research into a clinical setting. These new solutions further address critical issues in bringing robust and timely diagnosis to patients.

We want to be your dedicated partner that can offer a broad product portfolio of products and the promise of exciting new technologies, with an ever-increasing ability to provide you with trusted answers that positively affect patient diagnosis and ultimately patient treatment. We are committed to meet your lab's needs, both today and tomorrow.

It is this ability to drive innovation and implement game-changing technologies into a diagnostic setting which makes us truly unique. And as we continually develop new and compliant solutions, collaborating with key pathology labs, our pharma partners and leading academic institutions from around the world, we will work together with you to continue to develop technologies which will advance the diagnosis and treatment of cancer.

In this year's catalog, we are pleased to present several new assays, including the first FDA-approved tests for the PD-L1 marker. These products are the most recent example of our leadership in the diagnostics space, as the first company providing FDA-approved tests for PD-L1. In addition, we are proud to introduce 15 new FLEX Ready-to-Use antibodies for Dako Omnis as well as new SureFISH* probes are introduced.

We hope you enjoy reading and using the new catalog. We are here for you and your laboratory, and will continue to do our best to be first choice as a laboratory partner in clinical research and diagnostics, so that together we can provide patients with trusted answers.

Sincerely,

Christian Sauber
Vice President and General Manager Pathology Division

* SureFISH probes are manufactured by Agilent Technologies, Inc.

# Table of Contents

## Table of Contents (continued)



### Flow Cytometry and Specific Proteins

Reagent Partnership Division provides Dako's clinical diagnostic products within the area of *flow cytometry* and *specific proteins*. The Division focuses on two business areas:

- Retail sales of IVD-approved products within the areas of *flow cytometry* and *specific proteins*, including a broad range of assays for turbidimetry
- OEM bulk sales and assay development of antibody solutions and kits with special expertise in assay development and validation for turbidimetric platforms

To acquire a product catalog for Flow Cytometry and/or Specific Proteins, please contact rpsupport@agilent.com or visit our homepage www.dako.com/index/products.htm.

# New in 2016

## pharmDx Solution

### PD-L1 IHC 22C3 pharmDx (Code SK006)

For in vitro diagnostic use. PD-L1 IHC 22C3 pharmDx is a qualitative immunohistochemical assay using Monoclonal Mouse Anti-PD-L1, Clone 22C3 intended for use in the detection of PD-L1 protein in formalin-fixed, paraffin-embedded (FFPE) non-small cell lung cancer (NSCLC) tissue using EnVision FLEX visualization system on Autostainer Link 48. PD-L1 protein expression is determined by using Tumor Proportion Score (TPS), which is the percentage of viable tumor cells showing partial or complete membrane staining. The specimen should be considered PD-L1 positive if TPS ≥ 50% of the viable tumor cells exhibit membrane staining at any intensity.

PD-L1 IHC 22C3 pharmDx is indicated as an aid in identifying NSCLC patients for treatment with KEYTRUDA® (pembrolizumab).

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### PD-L1 IHC 28-8 pharmDx (Code SK005)

For in vitro diagnostic use. PD-L1 IHC 28-8 pharmDx is a qualitative immunohistochemical assay using Monoclonal Rabbit Anti-PD-L1, Clone 28-8 intended for use in the detection of PD-L1 protein in formalin-fixed paraffin-embedded (FFPE) non-squamous non-small cell lung cancer (NSCLC) and melanoma tissues using EnVision FLEX visualization system on Autostainer Link 48. PD-L1 protein expression is defined as the percentage of tumor cells exhibiting positive membrane staining at any intensity.

PD-L1 expression as detected by PD-L1 IHC 28-8 pharmDx in non-squamous NSCLC may be associated with enhanced survival from OPDIVO® (nivolumab).

Positive PD-L1 status as determined by PD-L1 IHC 28-8 pharmDx in melanoma is correlated with the magnitude of the treatment effect on progression-free survival from OPDIVO®.

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## Advanced Staining Solutions

### Dako Omnis Solution for IHC and ISH

| FLEX Ready-to-Use Antibodies for Dako Omnis | | | | |
|---|---|---|---|---|
| Page | Code | | Product | Package Size |
| 26 73 | GA500 | Rb a Hu | Alpha-1-Fetoprotein, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL |
| 26 75 | GA702 | Mo a Hu | Beta-Catenin, Clone β-Catenin-1, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL |
| 26 76 | GA515 | Rb a Hu | Calcitonin, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL |
| 26 76 | GA054 | Mo a Hu | Caldesmon, Clone h-CD, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL |
| 27 79 | GA623 | Mo a Hu | CD8, Clone C8/114B, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL |
| 27 81 | GA781 | Mo a Hu | CD23, Clone DAK-CD23, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL |
| 28 86 | GA508 | Rb a Hu | Chorionic Gonadotropin, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL |
| 28 87 | GA083 | Rb a Hu | Cyclin D1, Clone EP12, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL |
| 29 92 | GA659 | Rb a Hu | ERG, Clone EP111, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL |
| 30 96 | GA510 | Rb a Hu | IgA, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL |
| 30 100 | GA074 | Mo a Hu | Mammaglobin, Clone 304-1A5, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL |
| 31 104 | GA607 | Mo a Hu | Neurofilament Protein, Clone 2F11, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL |
| 31 109 | GA075 | Mo a Hu | Renal Cell Carcinoma Marker, Clone SPM314, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL |

### Autostainer Link Solution for IHC

| PT Link | | | |
|---|---|---|---|
| Page | Code | Product | Package Size |
| 37 | PT200 | PT Link Instrument | 1 unit |

| PT Link Accessories | | | |
|---|---|---|---|
| Page | Code | Product | Package Size |
| 37 | PT202 | Replacement Tank for PT200 | 1 unit |
| 37 | PT203 | Spare Tank Cover for PT200 | 1 unit |

## Molecular Pathology

| SureFISH Probes* | | | |
|---|---|---|---|
| Page | Code | Product | Package Size |
| 175 | G111200 | ALK BA P5 | 5 µL |
| 175 | G111400 | ALK BA P20 | 20 µL |
| 175 | G211400 | ALK BA P20 x 6 | 6 x 20 µL |
| 175 | G111900 | ALK BA P200 | 200 µL |
| 175 | G111202 | RET BA P5 | 5 µL |
| 175 | G111402 | RET BA P20 | 20 µL |
| 175 | G211402 | RET BA P20 X 6 | 6 x 20 µL |
| 175 | G111902 | RET BA P200 | 200 µL |
| 175 | G111201 | ROS BA P5 | 5 µL |
| 175 | G111401 | ROS BA P20 | 20 µL |
| 175 | G211401 | ROS BA P20 X 6 | 6 x 20 µL |
| 175 | G111901 | ROS BA P200 | 200 µL |

| ISH Accessories | | | |
|---|---|---|---|
| Page | Code | Product | Package Size |
| 180 | G9415A | IQFISH Fast Hybridization Buffer 200 | 200 µL |
| 180 | G9416A | IQFISH Fast Hybridization Buffer 200 x 6 | 6 x 200 µL |
| 180 | G9414A | IQFISH Fast Hybridization Buffer 900 | 900 µL |

## H&E Solution

### Dako CoverStainer Slide Rack (Code CS119)

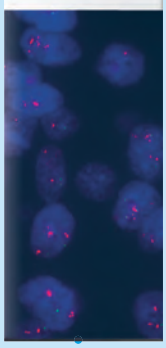
The slide rack for Dako CoverStainer has a unique design which minimizes reagent carryover, extending reagent longevity and enabling consistent staining results.

At the same time, the Dako CoverStainer slide rack gives you full visibility of your slides which will help you reduce the time spent sorting them.

* SureFISH probes are manufactured by Agilent Technologies, Inc.

# Get the full picture with Dako Solutions

FISH



Test request in LIS

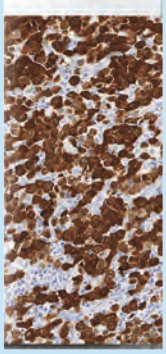
Instrument connectivity

Dako Omnis


DakoLink Omnis workstation

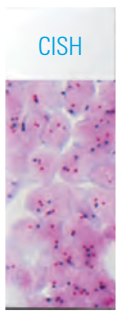
DakoLink server

IHC



Molecular Pathology

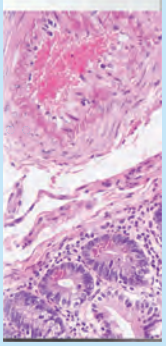
CISH



# Supported by excellent service and support for your laboratory

Dako CoverStainer

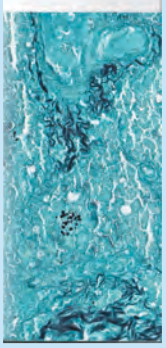
H&E



DakoLink workstation

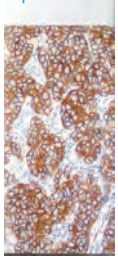
Artisan Link Pro

Special Stains



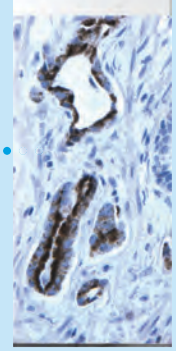
Companion Diagnostics

pharmDx



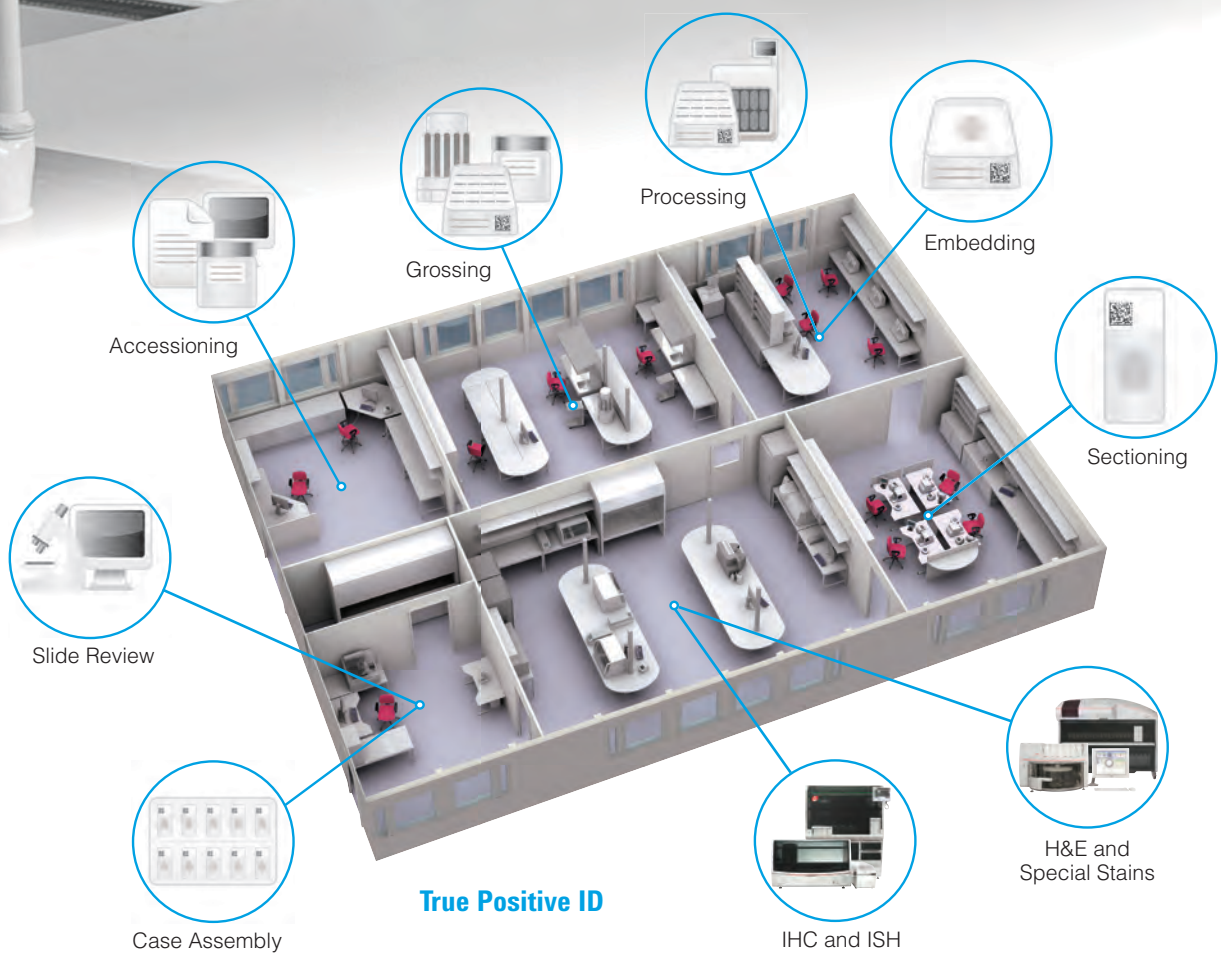
Autostainer Link

IHC



# Dako Lab Control Solutions


Dako


Accessioning
Grossing
Processing
Embedding
Sectioning
Slide Review
Case Assembly
IHC and ISH
H&E and
Special Stains
True Positive ID

# Dako Lab Control Solutions

## Experience a new level of lab control and insight

The Dako Lab Control solutions consist of staining management, sample tracking and connectivity software that is both flexible and scalable to meet the needs of each individual lab. Either as separate modules or combined, DakoLink and True Positive ID enable your lab to:

- Minimize errors to improve patient safety
- Improve efficiency by reducing hands-on time
- Provide a full electronic audit trail to support quality and regulatory needs

**The DakoLink and the DakoLink Omnis** staining management software connect all Dako staining instruments and allow you to share information across functions, create customized reports based on information captured and easily manage all instruments, slides, reagents and protocols.

**DakoLink True Positive ID (TPID)** adds sample creation and tracking capabilities, from accessioning to archiving. By registering every action for all case parts throughout all of the lab processes, TPID increases patient safety by reducing the risk of transcription errors and misplaced samples.

**Dako connectivity for total lab control**

DakoLink and TPID can integrate with your Laboratory Information System (LIS) and even connect between multiple locations, providing access from your lab to anywhere on your network. DakoLink has the ability to read LIS barcodes or create its own unique 2D barcode, ensuring every slide is uniquely identified.

With flexible connectivity capabilities, unique identification, work lists and reports, TPID and DakoLink work together to give you total control of your lab.


DakoLink

# Advanced Staining Solutions

# Introduction to the Advanced Staining Solutions

## We listened. We responded.

Our commitment to advancing pathology begins with something very simple – listening. By listening carefully to pathologists and lab personnel around the world, we learned that there is growing pressure to:

- Manage increasing slide volumes with limited personnel and financial resources
- Process slides faster, to minimize time to diagnosis
- Cope with fluctuations in workload without sacrificing turnaround time
- Improve quality control of processes and secure consistency in quality
- Increase the traceability of patient samples to enable accreditation
- Find and retain well-trained, qualified staff

With almost 50 years of dialogue with our customers, We have helped drive scientific advancement and certainty in cancer diagnostics. We remain committed to delivering novel solutions and innovative technologies which support you to meet the challenges of today and tomorrow.

## Dako Omnis. Developed by the lab for the lab.

Developed together with pathologists, lab managers and lab technicians from around the world, with the needs of the pathology lab very much in focus. Dako Omnis builds on our reputation for delivering quality reagents and staining solutions that bring certainty to cancer diagnostics.

Dako Omnis provides:

- A true automated, walk-away solution
- High throughput and overnight capacity
- Same-day IHC and ISH provides complete patient case management
- Unparalleled onboard capacity of temperature-controlled reagents
- Increased productivity with limited setup and minimal maintenance time

Dako Omnis delivers what pathologists, lab managers and technicians are asking for in terms of time, choice and better patient care.


## One supplier. Two choices.

With the addition of Dako Omnis, we can now deliver a unique and flexible combination of comprehensive advanced staining solutions. These solutions can be used independently or together, to help you meet the individual needs of your lab, without compromising on quality and consistency results.

Speak to your local representative to assess which solution addresses the needs of your lab now and in the future.

**Dako Omnis** is a generation ahead in IHC and ISH. Parallel or batch loading, the choice is yours. With a high throughput and full automation, this is a true walk-away solution. A controlled onboard environment facilitates unattended overnight processing of patient cases.

**Autostainer Link 48** is a compact, bench-top, open system that delivers the flexibility required in a research and clinical environment. Adaptable to your individual setup, and helps to maximize productivity by the decoupled pre-treatment and the ability to run either large batches of up to 48 IHC slides, or mini batches.

## The Dako FLEX RTU solution

**Ensures optimal staining results, slide after slide**

Using validated protocols and optimized reagents reduces the risk of false negative or false positive results. A robust, specific and sensitive IHC assay is critical for providing staining results that support an accurate patient diagnosis. The most important element in the qualification of the staining results of clinical samples is accurate selection and staining of control tissue.

Dako protocols are the result of a comprehensive study of numerous different tissue types, tissue thicknesses, protocol step durations, target retrieval methods, antibody dilutions, and pre-analytical variations.

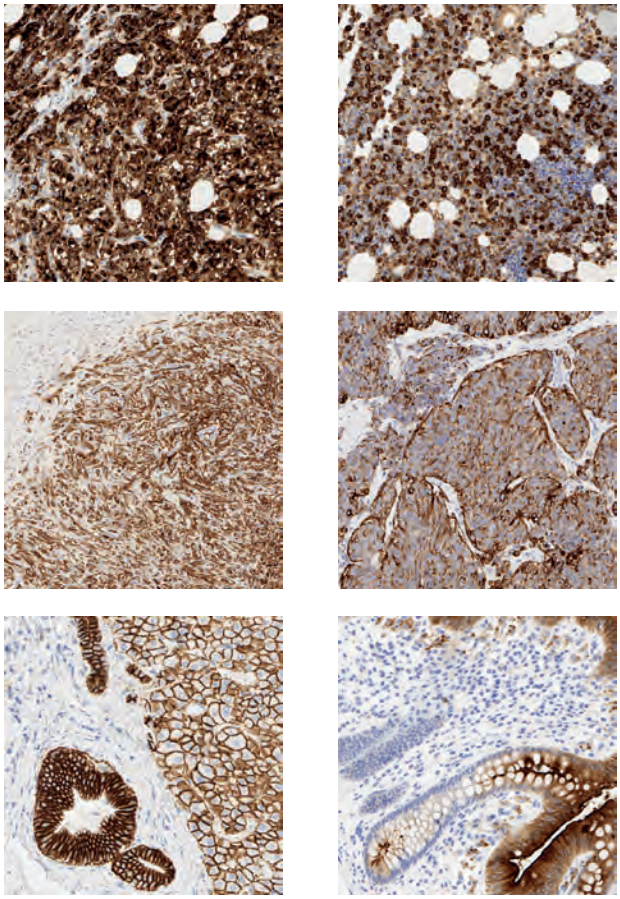
The Dako optimized protocol ensures that every test performance is highly robust, accurate and consistent, compensating for variations in pre-analytical parameters to provide increased certainty slide after slide.

Dako FLEX RTU is developed in collaboration with pathology experts to ensure optimal staining results.

The solution consists of:

- Pre-diluted antibody - FLEX RTU antibody
- Visualization system - EnVision FLEX/FLEX+
- Optimized and validated protocol - the recipe for consistent high-quality results

Find our range of FLEX RTU antibodies for all of our advanced staining platforms at www.dako.com/products.





| **FLEX RTU antibodies** | + | **EnVision FLEX visualization system** | + | **Validated protocols** |
|---|---|---|---|---|
| ● Pre-diluted and carefully selected for specificity and sensitivity<br>● Proven concept since 2007<br>● Excellent antibody quality - confirmed by various EQA schemes<br>● Broad portfolio of IVD antibodies | | ● Visualization system with low complexity and very high sensitivity<br>● Visibility of antigen in high and low expressing tissue<br>● Kit configuration provides<br>– Flexibility<br>– Consistency<br>– Simplicity | | ● Automated protocols developed for Dako solutions<br>● Optimized, validated protocols developed in cooperation with leading pathology experts<br>● Robust protocols compensate for pre-analytical variations |

**Plug and play on Dako advanced staining platforms**

# Dako Omnis Solution for IHC and ISH

Dako Omnis meets the challenges of the modern pathology lab. It accommodates an increasing number of diverse, advanced staining methods in an increasingly unpredictable working day. Dako Omnis achieves this by automating any advanced staining method using a simple interface with little hands-on time. Lab staff can deliver consistent IHC and ISH results with minimal training.

Continuous sample loading allows prioritized patient cases to stream seamlessly into an ongoing workflow. With turnaround times of less than four hours for FISH slides, they are ready within the same time frame as IHC slides. Dako Omnis delivers consistent results in IHC and ISH, regardless of operator experience. The system logs operator actions and built-in controls reduce possible human errors.

### Dako Omnis gives more time

- Process 165 IHC slides in a typical workday, including setting up overnight runs
- Handle the workload with fewer instruments thanks to an unparalleled capacity
- Enable faster diagnosis of whole patient cases with same-day IHC and ISH results
- Minimize hands-on time with automation designed for the clinical laboratory
- Free up lab techs for other tasks thanks to accurate run-time information

### Dako Omnis allows greater choice

- Choose continuous loading to match patient cases, or load in batches to utilize full through-put capacity
- Absorb peaks in workload by processing up to 60 slides in unattended overnight runs
- Eliminate operator waiting time by loading slides and/or reagents anytime, also during runs, while keeping an optimal through-put because runs continue uninterrupted during the loading
- Ensure transparency by enabling staff to monitor the slide flow from their workstations

### Dako Omnis enables better patient care

- Get results with ease and greater certainty thanks to the FLEX Ready-to-Use reagents and optimized protocols
- Increase lab quality and staffing options because Dako Omnis minimizes the risk of human error
- Facilitate lab accreditation and improve patient safety by automatic tracking and reporting
- Apply patient case workflow while optimizing capacity utilization thanks to the 5-slide racks
- Achieve consistent staining conditions with temperature-controlled and humidity-controlled staining chambers alongside temperature-controlled reagent positions

# Dako Omnis

| Dako Omnis | | | |
|---|---|---|---|
| IVD | GI100 | Advanced staining system | 1 unit |

IHC and ISH automated on the same platform, coupled with fully optimized and validated protocols, enables a fast turnaround time of patient cases. It supports your lab to deliver consistent quality and optimal results day after day and slide after slide for increased certainty.

**Dako Omnis provides**:

- Automated IHC and ISH, from deparaffinization to counterstaining
- Parallel or batch processing
- Flexible loading, virtually zero waiting time to add slides or reagents
- Up to 60 slides processed simultaneously
- Capacity for 60 temperature-controlled reagents on board
- Limited setup and little maintenance
- High throughput, including possibility for overnight run
- Full traceability of patient cases through onboard and workstation software
- Intuitive user interface and individual user log in
- LAN seats that display information where needed, including information from the LIS
- Dynamic Gap staining technology that helps ensure consistent, high-quality staining results with very low variation between slides, instruments and days.

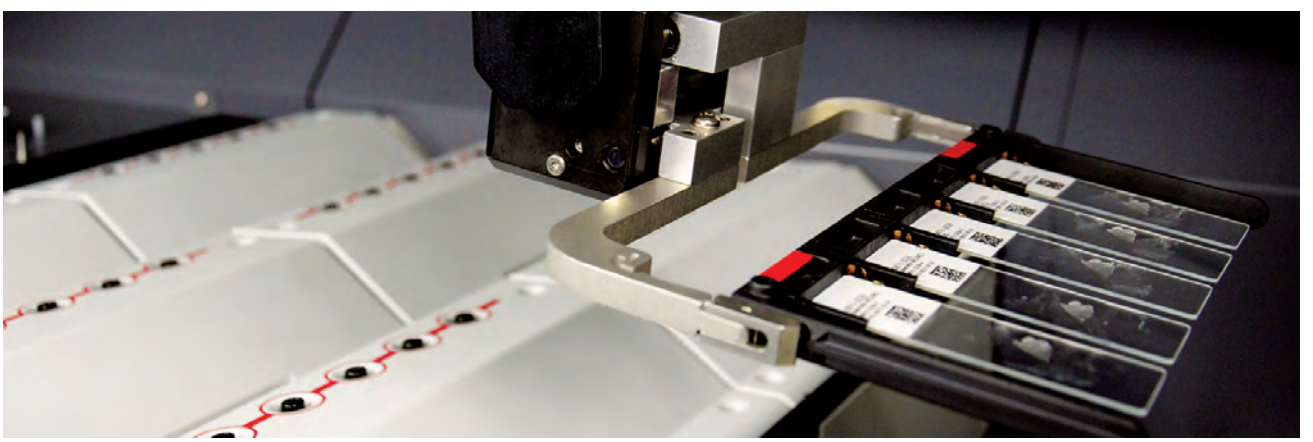
**IHC and ISH automated on the same platform**
Dako Omnis meets head-on the challenges in the modern pathology lab to accommodate an increasing number of diverse, advanced staining methods in an increasingly unpredictable working day. Dako Omnis achieves this by automating any advanced staining method using the simplest of user interfaces with little hands-on time, so new users can start producing results in minutes.

**Compensate for increasing fluctuations in workflow**
Process 60 IHC slides completely unattended overnight (or 45 IHC plus 15 ISH). You decide if the slides should be ready as soon as possible or at the start of the next working day.


Batch or continuous flow, the choice is yours. Continuous sample loading allows prioritized patient cases to stream seamlessly into an ongoing workflow. Full flexibility for the unpredictable lab environment.

**Monitor and control your staining workflow**
Monitor the progress of your run at a glance. Clear visual alerts notify you when user interactions are necessary. Dako Omnis connects to your LIS system. Share, monitor and track slides wherever you are.

**Manage increasing slide volumes with limited resources**
Load your IHC or ISH slides when convenient and the system informs you which reagents are needed. Once slides are loaded, you are free to perform other tasks. Just load and walk away. With minimal hands-on time, daily setup takes just 15 minutes and little daily maintenance is required. Less time for preparation, faster processing.



## Hardware Specifications

| | |
|---|---|
| Turn-around time | IHC: 2 hours 30 minutes<br>ISH: 3 hours 40 minutes |
| Throughput | 165 slides can be loaded in a typical workday (including preparation for an overnight run) |
| Slide capacity | 60 slides for IHC or ISH (up to 15 ISH slides) |
| Reagent capacity | 60 reagent vials |
| Bulk fluid capacity | 8 x 3.5 L bottle and 4 x 7 L bottle |
| Waste capacity | 4 x 7 L bottle (non-hazardous)<br>1 x 7 L bottle (low-hazardous, below limit values) |
| Dimensions | 57.1" W x 31.2" D x 69.5" H (145 cm W x 79.3 cm D x 176.5 cm H) |
| Weight | 1,323 lbs (600 kg) fully loaded |
| Voltage | 120/220-240 VAC |
| Power consumption | 1200 W |

## Features

### Processes

- Fully automated and simultaneous IHC and/or ISH
- Deparaffinization, staining and counterstaining with parallel processing

### Operation

- Continuous or batch workflow
- 5-slot racks to optimize capacity utilization and patient-case management
- Reagents and slides can be loaded anytime, also during runs
- Easy-to-use software interface and ready-to-use reagents
- Built-in controls to reduce possible human errors

### Staining conditions

- Temperature controlled onboard reagent storage
- Dynamic Gap staining technology
- Temperature and humidity controlled processing environment
- FLEX RTU reagents and protocols for optimal staining results

### Connectivity and control

- LAN seats for setup and monitoring from anywhere
- Full integration with Laboratory Information Systems
- 1D and 2D barcodes
- Data logging, reporting and access rights for traceability and accreditation

**Learn more about Dako Omnis by visiting www.dako.com/omnis**

# IHC Ancillaries and Accessories (Dako Omnis)

**Clearify™**

GC810 3.8 L

Clearify™ is used onboard Dako Omnis to remove paraffin from tissue sections for both IHC and ISH staining in a two-phase dewaxing procedure.

**DAB+ Substrate Chromogen System (Dako Omnis)**

IVD GV825 Onboard mixing 150 tests

EnVision FLEX DAB+ Substrate Chromogen System (Dako Omnis) is intended for use in immunohistochemistry together with Dako Omnis. The working solution is prepared onboard by the Dako Omnis instrument. It is a high sensitivity DAB system suitable for use in combination with the EnVision FLEX visualization system (Codes GV800/GV823). Upon oxidation, DAB forms a brown end-product at the site of the target antigen. The reagent is intended for use on formalin-fixed, paraffin-embedded tissue sections.

**Hematoxylin (Dako Omnis)**

IVD GC808 Ready-to-use 8 x 22.5 mL, 600 tests

Intended for use in immunohistochemistry together with Dako Omnis. The reagent is recommended for counterstaining on formalin-fixed, paraffin-embedded tissue sections providing a clear blue, nuclear staining.

**IHC Microscope Slides, FLEX**

IVD K8020 Coated glass slides 5 x 100 slides

Coated microscope slides for adhesion of formalin-fixed, paraffin-embedded tissue sections for use in immunohistochemistry with Dako EnVision FLEX visualization systems. FLEX IHC Microscope Slides are compatible with, but not limited to, the following Dako instruments: Dako Omnis, Autostainer Link, Dako Autostainer/Autostainer Plus and PT Link.

**Mixing Strip, for Dako Omnis**

GC107 10-well mixing strip 25 strips

Dako Omnis Mixing Strip is intended for mixing of the chromogen working solution during staining onboard Dako Omnis. Dako Omnis Mixing Strip has ten wells designed to hold chromogen for five slides with minimal dead volume. Wells are covered with a lid to limit spill of reagent during disposal of strips. Dako Omnis Mixing Strip can stand unsupported on a table. Arrows indicate correct insertion on Dako Omnis. Dako Omnis Mixing Strip is single use only and used strips are classified as hazardous waste due to chromogen residuals.

**Reagent Vial, Small/Large, for Dako Omnis**

GC201 Small vial 25 x 2 mL
GC202 Large vial 25 x 30 mL

Reagent vials designed to allow the use of a user-defined reagent on Dako Omnis. Each single-use bottle is labeled with positive identification technology. User-fillable reagent vial may be filled to a maximum fill volume of approximately 2 mL/30 mL, respectively. The vial closure contains a septum to reduce evaporation of reagent during onboard use in Dako Omnis reagent storage.

**Slide Rack, for Dako Omnis**

GC101 Slide racks holding 5 slides each 6 racks

Dako Omnis Slide Rack is designed for use on Dako Omnis. The Slide Rack holds the slides with samples to be processed on Dako Omnis.Each Slide Rack can carry up to five slides. Each slide is placed in a positioning groove and fixated by a spring. Dako Omnis is validated with FLEX IHC Microscope Slides and Superfrost Plus Slides. Dako does not recommend the use of other slide types. Dako Omnis Slide Rack is classified as non-hazardous waste, and Slide Rack parts comply with incineration or parts may be dismantled for recycling.

**Slide Rack Color Clips, for Dako Omnis**

GC104 Blue 25 clips
GC105 Green 25 clips
GC106 Gray 25 clips
GC103 Red 25 clips

The colored clips are attached to the slide rack for visual identification of individual racks. Each Dako Omnis Slide Rack can hold two Dako Omnis Slide Rack Color Clips and the colors available are: blue, green, gray and red. Dako Omnis Slide Racks are supplied with black color clips as default.

**Sulfuric Acid, 0.3 M, for Dako Omnis**

GC203 10 x 22.5 mL

Sulfuric Acid, 0.3 M is a generic cleaning agent used to remove residue (primarily protein) from various surfaces. It is used on Dako Omnis to automatically clean the Liquid Handling Tip after pipetting of reagents with high protein content, specifically primary antibodies.

**Wash Buffer (20x) (Dako Omnis)**

IVD GC807 Concentrate 20 x 175 mL, 1700 tests

Wash Buffer 20x (Dako Omnis) is intended for use in immunohistochemistry. The product is used as wash buffer for immunohistochemical staining procedures onboard Dako Omnis.

# ISH Ancillaries and Accessories (Dako Omnis)

### Fluorescence Mounting Medium (Dako Omnis)

IVD GM304 Ready-to-use 20 tests, 0.8 mL

Fluorescence Mounting Medium (Dako Omnis) is intended for mounting of formalin-fixed, paraffin-embedded (FFPE) tissue sections after FISH staining performed onboard the Dako Omnis instrument. The mounting medium also contains 500 µg/L DAPI for improved nuclei staining.

### ISH Cleaning Solution (Dako Omnis)

IVD GC207 Ready-to-use 100 tests, 10 mL

ISH Cleaning Solution (Dako Omnis) is an accessory to the Dako Omnis instrument. It is used for cleaning the pipette tip between dispenses of in situ hybridization probes. Washing with ISH Cleaning Solution dissolves ISH probe, allowing remaining probe to be effectively washed away with water. The product is provided in a ready-to-use vial for the Dako Omnis instrument.

### ISH Ethanol Solution, 96% (Dako Omnis)

IVD GM300 Ready-to-use 20 tests, 14 mL

ISH Ethanol Solution, 96% (Dako Omnis) is intended for use in automated in situ hybridization assays together with the Dako Omnis instrument on formalin-fixed, paraffin-embedded (FFPE) tissue sections. The solution is used in the wash step after target retrieval. The product is provided in a ready-to-use vial for the Dako Omnis instrument.

### ISH Lid, for Dako Omnis

GC102 5 lids

Dako Omnis ISH Lid is intended for use in FISH procedures. Each Dako Omnis ISH Lid holds five slides and has five built-in Cover Glasses and one Humidity Pad. The Cover Glasses serve to distribute probe buffer across the staining area and to reduce buffer evaporation. The Humidity Pad with deionized water added serves to increase the humidity inside Dako Omnis ISH Lid to further reduce evaporation. Dako Omnis ISH Lid also provides insulation to maintain proper denaturation temperature.
Dako Omnis ISH Lid is single use only and is classified as non-hazardous waste.

### ISH Pepsin (Dako Omnis)

IVD GM302 Ready-to-use 20 tests, 7 mL

ISH Pepsin (Dako Omnis) is intended for use in automated in situ hybridization assays together with the Dako Omnis instrument on formalin-fixed, paraffin-embedded (FFPE) tissue sections. The solution is used in the digestion step. The product is provided in a ready-to-use vial for the Dako Omnis instrument.

### ISH Pre-Treatment Solution (20x) (Dako Omnis)

IVD GM301 Concentrate 175 mL, 20x concentrated

ISH Pre-Treatment Solution (20x) (Dako Omnis) is intended for use in automated in situ hybridization assays together with the Dako Omnis instrument on formalin-fixed, paraffin-embedded (FFPE) tissue sections. The solution is used in the pre-treatment step. An inert green color is added to the buffer for easy identification and user friendliness. The volume is tailored for dilution in one Dako Omnis bulk bottle.

### ISH Stringent Wash Buffer (20x) (Dako Omnis)

IVD GM303 Concentrate 175 mL, 20x concentrated

ISH Stringent Wash Buffer (20x) (Dako Omnis) is intended for use in automated in situ hybridization assays together with the Dako Omnis instrument on formalin-fixed, paraffin-embedded (FFPE) tissue sections. The solution is used in the post-hybridization step. An inert yellow color is added to the buffer for easy identification and user friendliness. The volume is tailored for dilution in one Dako Omnis bulk bottle.

### Mixing Device, for Dako Omnis

GC116 1 unit

Dako Omnis Mixing Device is an accessory to the Dako Omnis instrument. It is designed specifically to support the fluorescence in situ hybridization (FISH) and the chromogenic in situ hybridization (CISH) procedures. The Dako IQISH buffer is extremely viscous, and during storage the reagent phase separates. Hence the Dako IQISH reagents require a particular preparatory processing to thaw and unify the content.
Some Dako ISH reagents are therefore provided in dedicated ISH reagent vials containing a mixing ball, and the Dako Omnis Mixing Device is designed to fit together with these ISH reagent vials.
Dako Omnis Mixing Device contains a magnet that enables the mixing ball to move up and down (110 cycles) inside the vial after 40 minutes thawing of the ISH reagent; thus ensuring a homogenous probe mix prior to application on the Dako Omnis instrument.

### Vial with Mixing Ball, 2 mL, for Dako Omnis

GC206 25 vials 2 mL

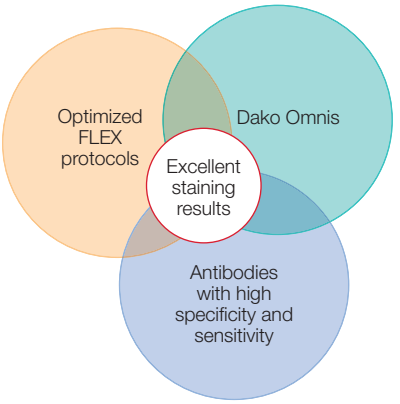
Dako Omnis Vial with Mixing Ball, 2 mL has been designed as an accessory for Dako Omnis and Dako Omnis Mixing Device and is intended for use in ISH procedures using user-provided FISH probes diluted in ethylene carbonate-based hybridization buffer (IQFISH). Dako Omnis Vial with Mixing Ball, 2 mL includes a mixing ball that is used by Dako Omnis Mixing Device to mix the IQFISH hybridization buffer with the user-provided probe. Each package contains 25 vials, 25 caps and 25 mixing balls.

# Primary Antibodies (FLEX Ready-to-Use) (Dako Omnis)

For Dako Omnis, we offer a dedicated series of high-quality, pre-diluted, ready-to-use (RTU) primary antibodies.

FLEX Ready-to-Use antibodies are pre-diluted primary antibodies specifically developed for automated use while maintaining the high-quality staining performance for which Dako antibodies is known.

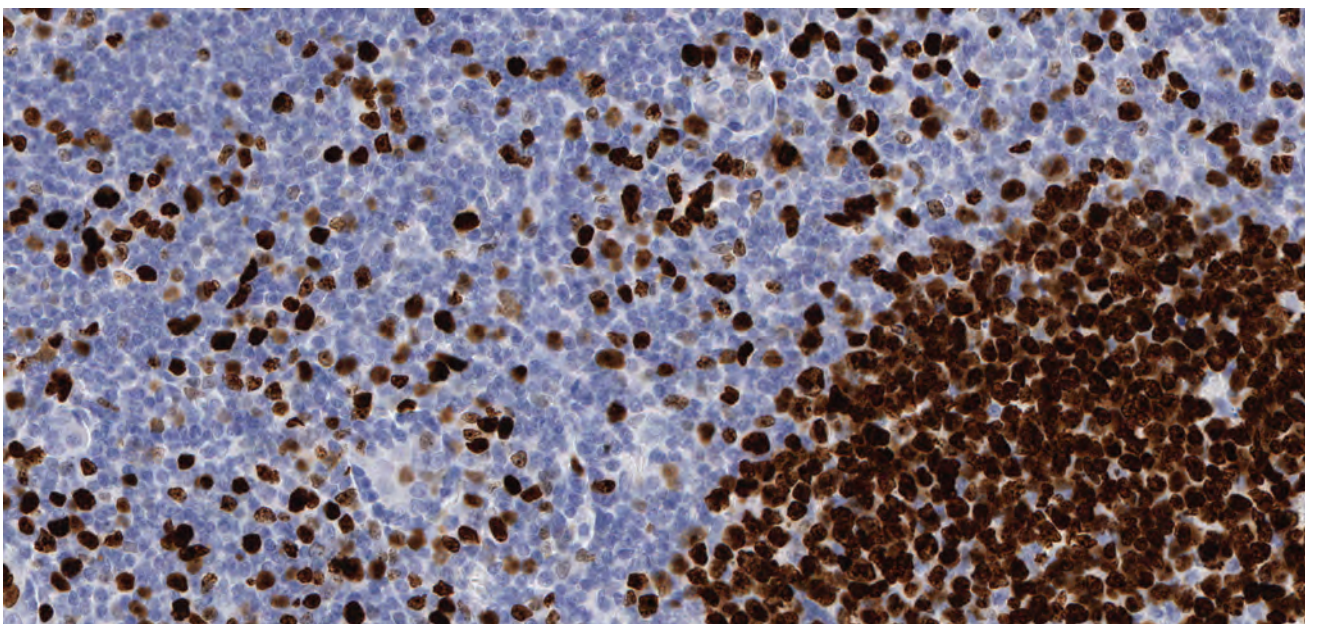
Each FLEX RTU antibody is accompanied by a validated protocol that is optimized to absorb variations related to pre-analytical factors. This enables a reliable staining performance in various tissue types containing both high and low-expression structures. The antibody specificity and protocol have both been evaluated and approved by external pathology experts.



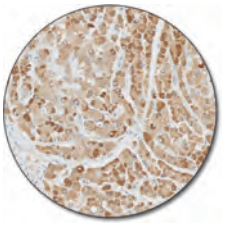

## Key Features

- Optimized staining performance of both high and low-expression structures
- Dako Omnis and the dynamic gap staining technology provide consistent and uniform staining with excellent morphology
- Crisp and clear staining with no background
- Optimal laboratory efficiency with RTU antibodies on Dako Omnis

The GA-Series FLEX Ready-to-Use Primary Antibodies listed in this section are packaged in Dako Omnis vials for use on Dako Omnis instruments, and can be used only with the EnVision FLEX system for Dako Omnis.

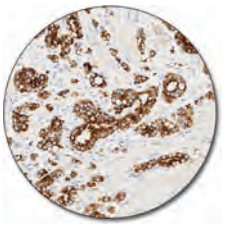


Polyclonal Rabbit Anti-Human
**Alpha-1-Fetoprotein**
IVD GA500 **NEW** 60 tests, 12 mL



*A1AT-deficient liver (FFPE) stained with FLEX Anti-Alpha-1-Antitrypsin, Code GA505.*

Monoclonal Rabbit Anti-Human
**AMACR**
IVD GA060 Clone 13H4 60 tests, 12 mL



*Prostate adenocarcinoma (FFPE) stained with FLEX Anti-AMACR, Code GA060.*

Monoclonal Mouse Anti-Human
**B-Cell-Specific Activator Protein**
IVD GA650 Clone DAK-Pax5 60 tests, 12 mL

*Lymph node (FFPE) stained with FLEX Anti-BSAP, Code GA650.*

Monoclonal Mouse Anti-Human
**BCL6 Protein**
IVD GA625 Clone PG-B6p 60 tests, 12 mL

*Follicular lymphoma (FFPE) stained with FLEX Anti-BCL6, Code GA625.*

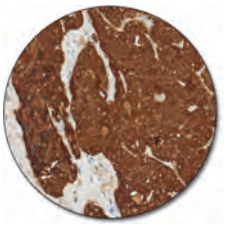
Monoclonal Mouse Anti-Human
**Beta-Catenin**
IVD GA702 Clone β-Catenin-1 **NEW** 60 tests, 12 mL

*Colon adenocarcinoma (FFPE) stained with FLEX Anti-Beta-Catenin, Code GA702.*

Monoclonal Mouse Anti-Human
**CA 125**
IVD GA701 Clone M11 60 tests, 12 mL

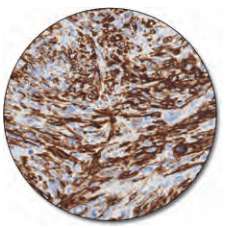
*Ovarian carcinoma (FFPE) stained with FLEX Anti-CA 125, Code GA701.*

Polyclonal Rabbit Anti-Human
**Calcitonin**
IVD GA515 **NEW** 60 tests, 12 mL



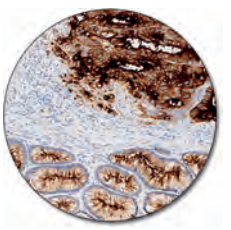
*Thyroid medullary carcinoma (FFPE) stained with FLEX Anti-Calcitonin, Code GA515.*

Monoclonal Mouse Anti-Human
**Caldesmon**
IVD GA054 Clone h-CD **NEW** 60 tests, 12 mL



*Leiomyosarcoma (FFPE) stained with FLEX Anti-Caldesmon, Code GA054.*

Monoclonal Mouse Anti-Human
**Carcinoembryonic Antigen (CEA)**
IVD GA622 Clone II-7 60 tests, 12 mL



*Colon adenocarcinoma (FFPE) stained with FLEX Anti-CEA, Code GA622.*

Polyclonal Rabbit Anti-Human
**Carcinoembryonic Antigen (CEA)**
IVD GA526 60 tests, 12 mL

# Primary Antibodies (FLEX Ready-to-Use) (Dako Omnis) (continued)

Monoclonal Mouse Anti-Human
**CD2**

IVD GA651 Clone AB75 60 tests, 12 mL

*Precursor T-lymphoblastic lymphoma (FFPE) stained with FLEX Anti-CD2, Code GA651.*

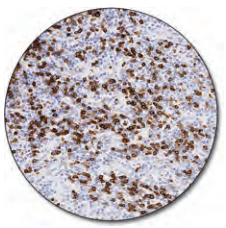
Polyclonal Rabbit Anti-Human
**CD3**

IVD GA503 60 tests, 12 mL

*T-cell lymphoma (FFPE) stained with FLEX Anti-CD3, Code GA503.*

Monoclonal Mouse Anti-Human
**CD7**

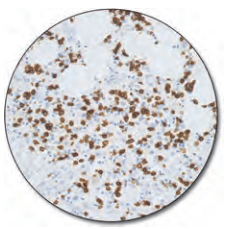
IVD GA643 Clone CBC.37 60 tests, 12 mL



*Lymphoma (FFPE) stained with FLEX Anti-CD7 Code GA643.*

Monoclonal Mouse Anti-Human
**CD8**

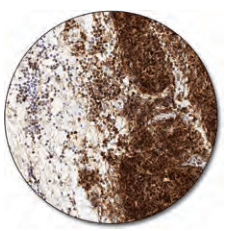
IVD GA623 Clone C8/144B **NEW** 60 tests, 12 mL



*Angioimmunoblastic T-cell lymphoma (FFPE) stained with FLEX Anti-CD8, Code GA623.*

Monoclonal Mouse Anti-Human
**CD10**

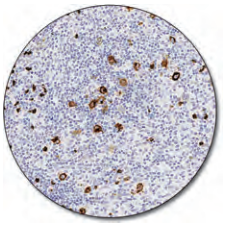
IVD GA648 Clone 56C6 60 tests, 12 mL



*Lymphoma (FFPE) stained with FLEX Anti-CD10, Code GA648.*

Monoclonal Mouse Anti-Human
**CD15**

IVD GA062 Clone Carb-3 60 tests, 12 mL



*Hodgkin's Lymphoma (FFPE) stained with FLEX Anti-CD15, Code GA062.*

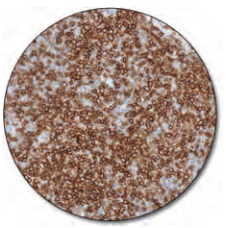
Monoclonal Mouse Anti-Human
**CD20cy**

IVD GA604 Clone L26 60 tests, 12 mL

*B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma (FFPE) stained with FLEX Anti-CD20cy, Code GA604.*

Monoclonal Mouse Anti-Human
**CD23**

IVD GA781 Clone DAK-CD23 **NEW** 60 tests, 12 mL



*Chronic lymphocytic leukemia/small lymphocytic lymphoma (FFPE) stained with FLEX Anti-CD23, Code GA781.*

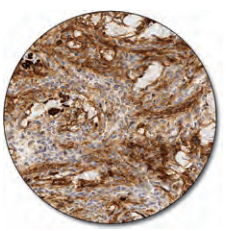
Monoclonal Mouse Anti-Human
**CD31, Endothelial Cell**

IVD GA610 Clone JC70A 60 tests, 12 mL

*Angiosarcoma (FFPE) stained with FLEX Anti-CD31, Code GA610.*

Monoclonal Mouse Anti-Human
**CD34 Class II**

IVD GA632 Clone QBEnd 10 60 tests, 12 mL

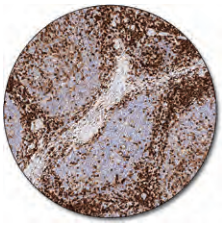


*Angiosarcoma (FFPE) stained with FLEX Anti-CD34, Code GA632.*

# Primary Antibodies (FLEX Ready-to-Use) (Dako Omnis) (continued)

Monoclonal Mouse Anti-Human
**CD43**

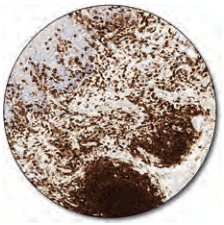
IVD GA636 Clone DF-T1 60 tests, 12 mL



*Tonsil (FFPE) stained with FLEX Anti-CD43, Code GA636.*

Monoclonal Mouse Anti-Human
**CD45, Leucocyte Common Antigen**

IVD GA751 Clones 2B11 + PD7/26 60 tests, 12 mL



*Tonsil (FFPE) stained with FLEX Anti-CD45, Code GA751.*

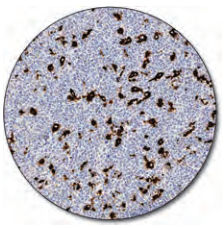
Monoclonal Mouse Anti-Human
**CD68**

IVD GA609 Clone KP1 60 tests, 12 mL

*Tonsil (FFPE) stained with FLEX Anti-CD68, Code GA609.*

Monoclonal Mouse Anti-Human
**CD68**

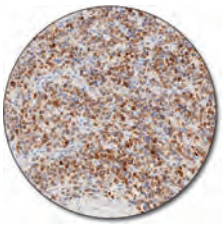
IVD GA613 Clone PG-M1 60 tests, 12 mL



*Tonsil (FFPE) stained with FLEX Anti-CD68, Code GA613.*

Monoclonal Mouse Anti-Human
**CD79α**

IVD GA621 Clone JCB117 60 tests, 12 mL



*Plasmacytoma (FFPE) stained with FLEX Anti-CD79α, Code GA621.*

Monoclonal Mouse Anti-Human
**CD138**

IVD GA642 Clone MI15 60 tests, 12 mL

*High grade myeloma (FFPE) stained with FLEX Anti-CD138, Code GA642.*

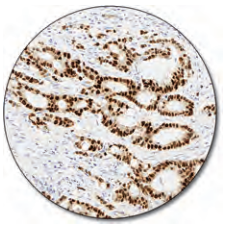
Monoclonal Mouse Anti-Human
**CD246, ALK Protein**

IVD GA641 Clone ALK1 60 tests, 12 mL

*Anaplastic large cell lymphoma (FFPE) stained with FLEX Anti-CD246, ALK Protein, Code GA641.*

Monoclonal Mouse Anti-Human
**CDX2**

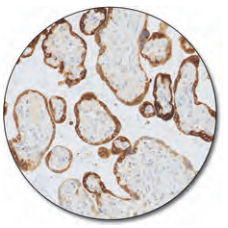
IVD GA080 Clone DAK-CDX2 60 tests, 12 mL



*Colon adenocarcinoma (FFPE) stained with FLEX Anti-CDX2, Code GA080.*

Polyclonal Rabbit Anti-Human
**Chorionic Gonadotropin (hCG)**

IVD GA508 **NEW** 60 tests, 12 mL



*Placenta (FFPE) stained with FLEX Anti-Human Chorionic Gonadotropin, Code GA508.*

Monoclonal Rabbit Anti-Human
**Cyclin D1**

IVD GA083 Clone EP12 **NEW** 60 tests, 12 mL

*Mantle cell lymphoma (FFPE) stained with FLEX Anti-Cyclin D1, Code GA083.*

# Primary Antibodies (FLEX Ready-to-Use) (Dako Omnis) (continued)

Monoclonal Mouse Anti-Human
**Cytokeratin**

IVD GA053 Clone AE1/AE3 60 tests, 12 mL

*Adenocarcinoma (FFPE) stained with FLEX Anti-Cytokeratin, Code GA053.*

Monoclonal Mouse Anti-Human
**Cytokeratin 5/6**

IVD GA780 Clone D5/16 B4 60 tests, 12 mL

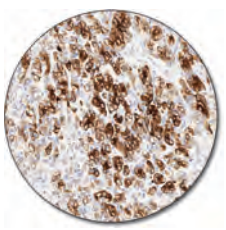
Monoclonal Mouse Anti-Human
**Cytokeratin 7**

IVD GA619 Clone OV-TL 12/30 60 tests, 12 mL

*Ductal carcinoma (FFPE) stained with FLEX Anti-Cytokeratin 7, Code GA619.*

Monoclonal Mouse Anti-Human
**Cytokeratin 18**

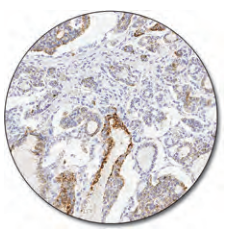
IVD GA618 Clone DC 10 60 tests, 12 mL



*Renal clear cell carcinoma stained with FLEX Anti-Cytokeratin 18, Code GA618.*

Monoclonal Mouse Anti-Human
**Cytokeratin 19**

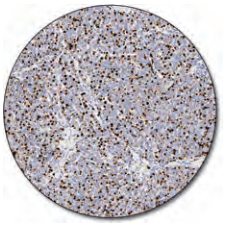
IVD GA615 Clone RCK108 60 tests, 12 mL



*Thyroid papillary carcinoma (FFPE) stained with FLEX Anti-Cytokeratin 19, Code GA615.*

Monoclonal Mouse Anti-Human
**Cytokeratin 20**

IVD GA777 Clone $K_s$20.8 60 tests, 12 mL



*Merkel cell carcinoma (FFPE) stained with FLEX Anti-Cytokeratin 20, Code GA777.*

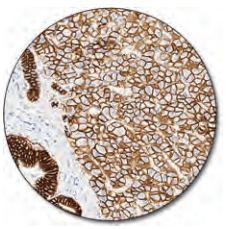
Monoclonal Mouse Anti-Human
**Cytokeratin, High Molecular Weight**

IVD GA051 Clone 34βE12 60 tests, 12 mL

*Prostate (FFPE) stained with FLEX Anti-Cytokeratin HMW, Code GA051.*

Monoclonal Mouse Anti-Human
**E-Cadherin**

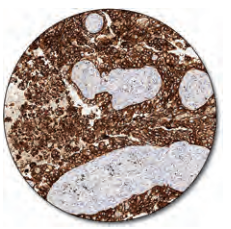
IVD GA059 Clone NCH-38 60 tests, 12 mL



*Poorly differentiated ductal carcinoma (FFPE) stained with FLEX Anti-E-Cadherin, Code GA059.*

Monoclonal Mouse Anti-Human
**Epithelial Antigen**

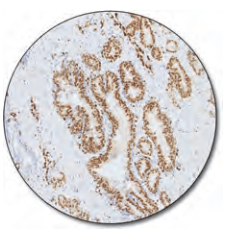
IVD GA637 Clone Ber-EP4 60 tests, 12 mL



*Adenocarcinoma (FFPE) stained with FLEX Anti-Epithelial Antigen, Code GA637.*

Monoclonal Rabbit Anti-Human
**ERG (Ets-Related Gene)**

IVD GA659 Clone EP111 **NEW** 60 tests, 12 mL

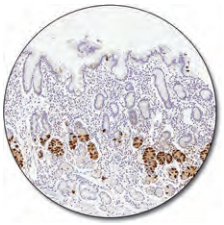


*Prostate carcinoma (FFPE) stained with FLEX Anti-ERG, Code GA659.*

# Primary Antibodies (FLEX Ready-to-Use) (Dako Omnis) (continued)

Polyclonal Rabbit Anti-Human
**Gastrin**

IVD GA519 60 tests, 12 mL



*Gastrin-producing tumor (FFPE) stained with FLEX Anti-Gastrin, Code GA519.*

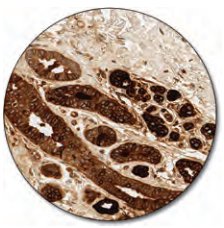
Polyclonal Rabbit Anti-
**Glial Fibrillary Acidic Protein**

IVD GA524 60 tests, 12 mL

*Glioblastoma (FFPE) stained with FLEX Anti-GFAP, Code GA524.*

Monoclonal Mouse Anti-Human
**Gross Cystic Disease Fluid Protein-15**

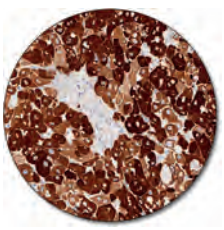
IVD GA077 Clone 23A3 60 tests, 12 mL



*Breast hyperplasia (FFPE) stained with FLEX Anti-GCDFP-15, Code GA077.*

Monoclonal Mouse Anti-Human
**Hepatocyte**

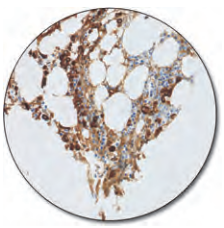
IVD GA624 Clone OCH1E5 60 tests, 12 mL



*Hepatocellular carcinoma (FFPE) stained with FLEX Anti-Hepatocyte, Code GA624.*

Polyclonal Rabbit Anti-Human
**IgA**

IVD GA510 **NEW** 60 tests, 12 mL



*Multiple myeloma (FFPE, bone marrow) stained with FLEX Anti-IgA, Code GA510.*

Polyclonal Rabbit Anti-Human
**Kappa Light Chains**

IVD GA506 60 tests, 12 mL

*Tonsil (FFPE) stained with FLEX Anti-Kappa light chains, Code GA506.*

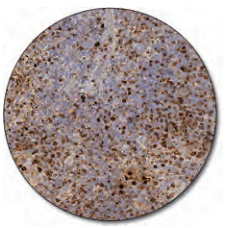
Monoclonal Mouse Anti-Human
**Ki-67 Antigen**

IVD GA626 Clone MIB-1 60 tests, 12 mL

*High grade lymphoma (FFPE) stained with FLEX Anti-Ki-67, Code GA626.*

Polyclonal Rabbit Anti-Human
**Lambda Light Chains**

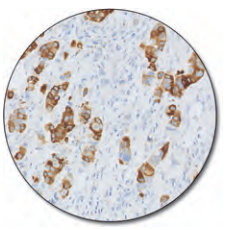
IVD GA507 60 tests, 12 mL



*Tonsil (FFPE) stained with FLEX Anti-Lambda Light Chains, Code GA507.*

Monoclonal Mouse Anti-Human
**Mammaglobin**

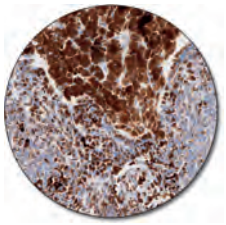
IVD GA074 Clone 304-1A5 **NEW** 60 tests, 12 mL



*Invasive ductal carcinoma (FFPE) stained with FLEX Anti-Mammaglobin, Code GA074.*

Monoclonal Mouse Anti-Human
**Melanosome**

IVD GA052 Clone HMB-45 60 tests, 12 mL



*Melanoma (FFPE) stained with FLEX Anti-Melanosome, Code GA052.*

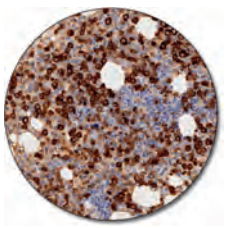
Monoclonal Mouse Anti-Human
**MUM1 Protein**

IVD GA644 Clone MUM1p 60 tests, 12 mL

*Diffuse large B-cell lymphoma (FFPE) stained with FLEX Anti-MUM1, Code GA644.*

Polyclonal Rabbit Anti-Human
**Myeloperoxidase**

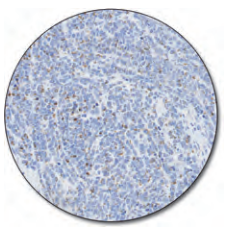
IVD GA511 60 tests, 12 mL



*Acute myeloid leukemia (FFPE) stained with FLEX Anti-Myeloperoxidase, Code GA511.*

Monoclonal Mouse Anti-Human
**Neurofilament Protein**

IVD GA607 Clone 2F11 **NEW** 60 tests, 12 mL



*Merkel cell tumor (FFPE) stained with FLEX Anti-Neurofilament Protein, Code GA607.*

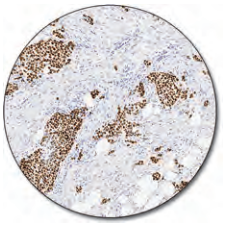
Monoclonal Mouse Anti-Human
**Nucleophosmin**

IVD GA652 Clone 376 60 tests, 12 mL

*Acute myeloid leukemia (AML) (FFPE) stained with FLEX Anti-Nucleophosmin, Code GA652.*

Monoclonal Mouse Anti-Human
**p53 Protein**

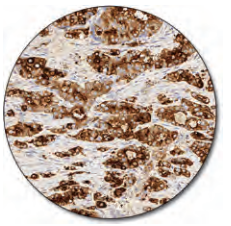
IVD GA616 Clone DO-7 60 tests, 12 mL



*Invasive transitional cell carcinoma (FFPE) stained with FLEX Anti-p53, Code GA616.*

Polyclonal Rabbit Anti-Human
**Prostate-Specific Antigen (PSA)**

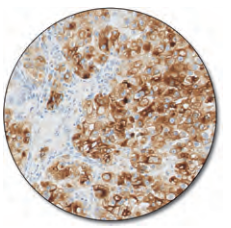
IVD GA514 60 tests, 12 mL



*Prostate adenocarcinoma (FFPE) stained with FLEX Anti-Prostate Specific Antigen, Code GA514.*

Monoclonal Mouse Anti-Human
**Renal Cell Carcinoma Marker**

IVD GA075 Clone SPM314 **NEW** 60 tests, 12 mL



*Renal clear cell carcinoma (FFPE) stained with FLEX Anti-Renal Cell Carcinoma Marker, Code GA075.*

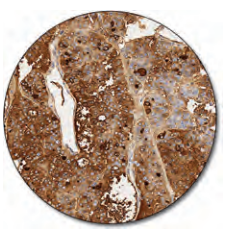
Polyclonal Rabbit Anti-
**S100**

IVD GA504 60 tests, 12 mL

*Breast carcinoma (FFPE) stained with FLEX Anti-S100, Code GA504.*

Polyclonal Rabbit Anti-Human
**Thyroglobulin**

IVD GA509 60 tests, 12 mL

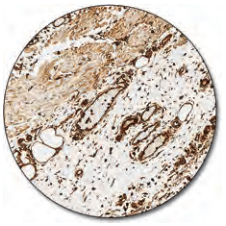


*Thyroid follicular carcinoma (FFPE) stained with FLEX Anti-Thyroglobulin, Code GA509.*

## Primary Antibodies (FLEX Ready-to-Use) (Dako Omnis) (continued)

Monoclonal Mouse Anti-
**Vimentin**

IVD GA630 Clone V9 60 tests, 12 mL



*Bladder wall (FFPE) stained with FLEX Anti-Vimentin, Code GA630.*

Polyclonal Rabbit Anti-Human
**Von Willebrand Factor**

IVD GA527 60 tests, 12 mL

*Angiosarcoma (FFPE) stained with FLEX Anti-Von Willebrand Factor, Code GA527.*

## Negative Controls (FLEX Ready-to-Use) (Dako Omnis)

**Universal Negative Control for GA-Series Mouse Primary Antibodies**

IVD GA750 Ready-to-use 120 tests, 24 mL

Universal negative control for all FLEX ready-to-use **mouse** primary antibodies for use on the Dako Omnis instrument. Packaged in vials for Dako Omnis.

**Universal Negative Control for GA-Series Rabbit Primary Antibodies**

IVD GA600 Ready-to-use 120 tests, 24 mL

Universal negative control for all FLEX ready-to-use **rabbit** primary antibodies for use on the Dako Omnis instrument. Packaged in vials for Dako Omnis.

# Visualization Systems (EnVision FLEX) (Dako Omnis)

**EnVision FLEX Visualization Systems for Dako Omnis**
EnVision FLEX, the well-known Dako visualization system, has been configured into a dedicated system for Dako Omnis. The highly sensitive polymer-based EnVision FLEX system builds upon simple intelligent chemistry that allows for distinct clear staining. The Dynamic Gap staining technology utilized onboard Dako Omnis, the high-quality primary antibodies and the EnVision FLEX system all come together to provide a robust system that produces stains with excellent morphology and diagnostic certainty.

The streamlined kits and optional reagents for Dako Omnis are packaged for your convenience and are easy to order, making the system flexible, versatile and functional.

| EnVision FLEX Systems | | | | |
|---|---|---|---|---|
| | FLEX<br>High pH | FLEX<br>Low pH | FLEX+<br>High pH | FLEX+<br>Low pH |
| Code | GV800<br>or | GV800 + GV805<br>or | GV800 + GV821 (Mouse LINKER)<br>or | GV800 + GV805 + GV821 (Mouse LINKER)<br>or |
| Code | GV823 | GV823 + GV805 | GV800 + GV809 (Rabbit LINKER) | GV800 + GV805 + GV809 (Rabbit LINKER) |

**EnVision FLEX, High pH (Dako Omnis)**

IVD GV800 HRP. Rabbit/Mouse. High pH 600 tests

EnVision FLEX, High pH is a high-sensitivity visualization system intended for use in immunohistochemistry together with Dako Omnis. The dual link system detects primary mouse and rabbit antibodies and the reaction is visualized by DAB+ Chromogen. The convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer and Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9). EnVision FLEX convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Dako Omnis.

**EnVision FLEX Mini Kit, High pH (Dako Omnis)**

IVD GV823 HRP. Rabbit/Mouse. High pH 150 tests

EnVision FLEX Mini Kit, High pH is a high-sensitivity visualization system intended for use in immunohistochemistry together with Dako Omnis. The dual link system detects primary mouse and rabbit antibodies and the reaction is visualized by DAB+ Chromogen. The convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer and Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9). EnVision FLEX convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Dako Omnis.

**Mouse LINKER (Dako Omnis)**

IVD GV821 Ready-to-use 75 tests, 22.5 mL

EnVision FLEX+ Mouse LINKER is an optional EnVision FLEX+ reagent and may be used with EnVision FLEX convenience kits (GV800 and GV823) for Dako Omnis to amplify the signal of primary mouse antibodies.

**Rabbit LINKER (Dako Omnis)**

IVD GV809 Ready-to-use 75 tests, 22.5 mL

EnVision FLEX+ Rabbit LINKER is an optional EnVision FLEX+ reagent and may be used with EnVision FLEX convenience kits (GV800 and GV823) for Dako Omnis to amplify the signal of primary rabbit antibodies.

**Target Retrieval Solution, High pH (Dako Omnis)**

IVD GV804 Concentrate 3 x 68 mL, 225 tests

EnVision FLEX Target Retrieval Solution, High pH (Dako Omnis) is an optional EnVision FLEX reagent containing 50x concentrated Tris/EDTA, pH 9 and is compatible with EnVision FLEX convenience kits for Dako Omnis. The volume is optimized for dilution in Dako Omnis bulk bottles.

**Target Retrieval Solution, Low pH (Dako Omnis)**

IVD GV805 Concentrate 3 x 68 mL, 225 tests

EnVision FLEX Target Retrieval Solution, Low pH (Dako Omnis) is an optional EnVision FLEX reagent containing 50x concentrated citrate buffer, pH 6.1 and is compatible with EnVision FLEX convenience kits for Dako Omnis. The volume is optimized for dilution in Dako Omnis bulk bottles.

# Autostainer Link Solution for IHC

Automated Link Platforms is the line of instruments with which pathology laboratories will experience an outstanding level of integration that provides high productivity and efficient workflow.

The Autostainer Link 48 staining instrument with the latest release of DakoLink software enables improved productivity in a pathology laboratory by staining 48 slides in less than three hours. When processing slides in parallel, using only one Autostainer Link 48 and one PT Link pre-treatment module, up to 144 slides can be processed in a regular working day, including setting up an overnight run.

With PT Link, pathology laboratories can further maximize productivity by reducing the number of operations needed in the specimen preparation processes of deparaffinization, rehydration and target retrieval. The fact that pre-treatment and staining are decoupled gives high flexibilitly and productivity.

The revolutionary DakoLink software and connectivity options will improve workflow and productivity even further by, among other things, completely eliminating re-labeling steps and repetitive test request entries.

### Autostainer Link 48

- Process 48 slides in less than three hours
- Organize your working day to the minute with precise run-time estimation
- Achieve high quality, when staining slides with FLEX RTU primary antibodies and EnVision FLEX/FLEX+ visualization optimized for Autostainer Link 48

### PT Link

- Maximize productivity by processing slides in parallel
- Run deparaffinization, target retrieval and dehydration in one step with the 3-in-1 buffer
- Have confidence in your pre-treatment process, as it is controlled every second
- Possibility to track via DakoLink software

### DakoLink Software

- Enables a fully integrated pathology solution with Dako instrumentation for Advanced Staining and Histostaining
- Significant tracking improvements by implementing slide pre-treatment
- Full laboratory connectivity by controlling all slides and slide IDs from one workstation
- Reporting made easy
- Improved laboratory efficiency

# Autostainer Link 48

| **Autostainer Link 48** | | | |
|---|---|---|---|
| IVD | AS480 | Slide-processing instrument | 1 unit |

Reliability and innovation come together in Autostainer Link 48. Our trusted immunohistochemistry stainer is united with revolutionary software and connectivity options, delivering an outstanding level of integration that provides high productivity and efficient workflow.

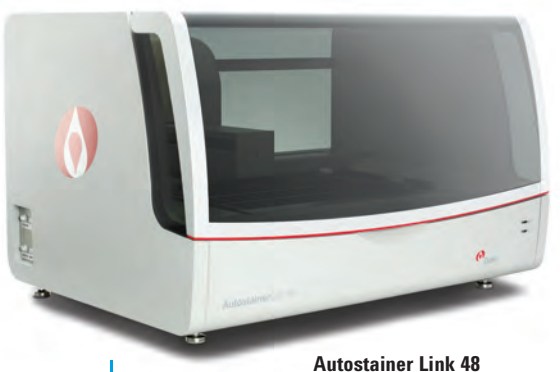
Autostainer Link 48 ensures optimal staining results and offers a high slide and reagent capacity. Save space and centralize slide programming by connecting up to three instruments and three PT Links to one computer.
The DakoLink software has optimized run-time estimation.

### Get high quality staining results - on time

- Process 48 slides in less than three hours. This makes it possible to finalize 96 slides during a regular working day with only one Autostainer Link 48 and one PT Link
- Gain up to 45 minutes of your run time compared to our previously fastest Autostainer – Autostainer Plus
- Get the most out of your laboratory time by processing slides in parallel using PT Link and the fastest ever Autostainer Link 48
- Have the freedom to set up your own standards and a possibility to control these

### Confidence secured

- Consistent high-quality staining is ensured by validated staining protocols optimized with Dako reagents – FLEX ready-to-use primary antibodies and EnVision FLEX/FLEX+ visualization systems
- Get necessary quality control documentation with DakoLink consolidated reporting. Any kind of customized report is just a few mouse clicks away



**Autostainer Link 48**

**FLEX Ready-to-Use reagents**

## The Autostainer Link solution

**DakoLink software**

**PT Link**

# Autostainer Link 48 (continued)

| Hardware Specifications | |
|---|---|
| Dimensions | 35" W x 26" D x 27" H (0.89 m W x 0.66 m D x 0.68 m H) |
| Weight | 147 lbs (66.7 kg) |
| Electrical specifications | 120 V: 110/120 V (+/- 10%), 60 Hz (+/- 2 Hz)<br>220 V: 220/240 V (+/- 10%), 50 Hz (+/- 2 Hz) |
| Current requirements | 3 A at 220 V; 6 A at 110 V |
| Normal operating temperature | 18-26 °C (64-79 °F) |
| Total slide capacity | 48 slides (US and international sizes) |
| Reagent capacity | 42 reagents |
| Bulk fluid capacity | 2 x 10 L; 10 000 slides (at 200 µL dispense volume) |
| Waste capacity | 2 x 10 L; 10 000 slides (at 200 µL dispense volume) |
| Software requirements | Windows XP SP3, Windows 7 (32 bit) or higher |

## Ancillaries and Accessories (Autostainer Link)

### Hematoxylin (Link)

IVD SK308 Ready-to-use 45 mL

This product is optimized for use on Autostainer Link Instruments. This histological staining reagent is suitable for visualization of nuclei in tissue sections and cell preparations. This product does not contain alcohol and is suitable for use with all chromogens commonly used in immunohistochemistry applications.

### IHC Microscope Slides, FLEX

IVD K8020 Coated glass slides 5 x 100 slides

Coated microscope slides for adhesion of formalin-fixed, paraffin-embedded tissue sections for use in immunohistochemistry with Dako EnVision FLEX visualization systems. FLEX IHC Microscope Slides are compatible with, but not limited to, the following Dako instruments: Dako Omnis, Autostainer Link, Dako Autostainer/Autostainer Plus and PT Link.

### Instrument Cleaning Kit (Link)

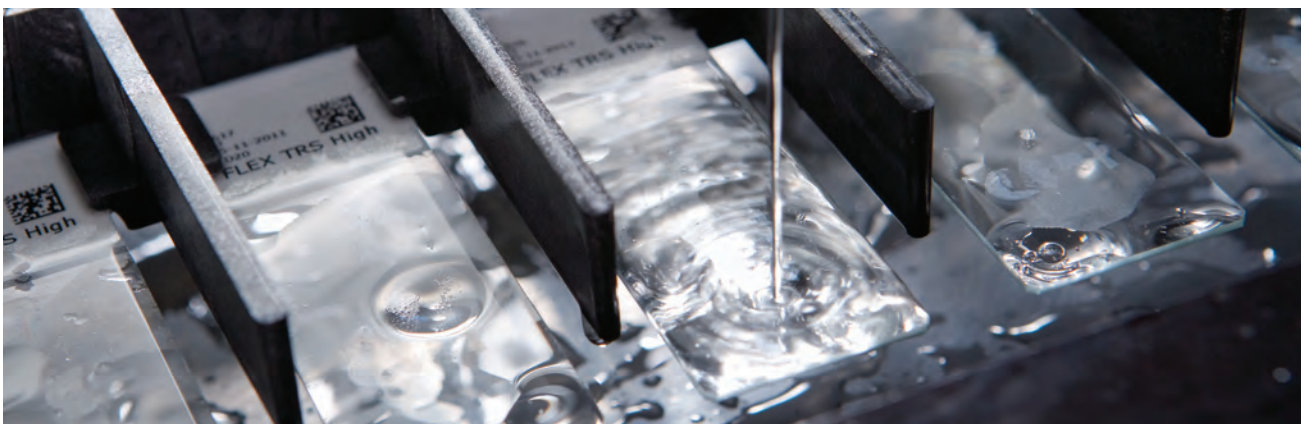
IVD SK301 Ready-to-use 18 runs

The cleaning kit provides enough solution for 18 cleaning procedures for Autostainer Link 48. The easy-to-follow instructions for use can be found in Autostainer Link 48 Basic User Guide.

### Reagent Bottles, User-Fillable, for Autostainer Link Instruments

IVD SK200 25 bottles 5 mL
IVD SK201 25 bottles 12 mL
IVD SK202 25 bottles 25 mL
IVD SK203 25 bottles 50 mL

Reagent bottles designed to allow the use of a user-defined reagent on Autostainer Link instruments. Each single-use bottle is labeled with positive identification technology.



# PT Link, Instrument and Accessories

### PT Link, Pre-Treatment Module for Tissue Specimens

IVD PT200 **NEW** 1 unit

PT Link allows the entire pre-treatment process of deparaffinization, rehydration and epitope retrieval to be combined into a well-documented, 3-in-1 specimen preparation procedure.
With PT Link, pathology laboratories can maximize productivity by reducing the number of operations needed in the pre-treatment process, while saving time by using the same slide rack from pre-treatment all the way through the immunohistochemical staining. Quality control reports from the pre-treatment process can be printed directly from the user-friendly software, while additional confidence in the procedures come from features such as no-boil option and low-fluid warning at 5 mm below the frosted label area of a slide. Options such as delayed start and preheat mode provide the flexibility that is required to make pre-treatment work in parallel with other processes


### DakoLink Software

- Enables a fully integrated pathology solution with Dako instrumentation for Advanced staining and Histostaining
- Significant tracking improvements by implementing slide pre-treatment
- Full laboratory connectivity by maintaining all slides and IDs from one workstation
- Reporting made easy
- Improved laboratory efficiency

### Hardware Specifications

| | |
|---|---|
| Pre-treatment tanks | 2 |
| Total slide capacity | 48 (each tank holds 24 slides in two Autostainer slide racks) |
| Dimensions | 29.0 cm W x 64.7 cm D x 32.0 cm H (11.4" W x 25.5" D x 12.6" H) |
| Weight | 23 kg (51 lbs) |
| Electrical specifications | 100-120 V, 50 Hz/60 Hz; 220-240 V, 50 Hz/60 Hz |
| Normal operating temperature | 15-30 °C (59-86 °F) |
| Temperature range for target retrieval mode | 65-102 °C (149-216 °F) |
| Temperature range for preheat mode | 30-85 °C (86-185 °F) |

### PT Link Rinse Station

IVD PT109 1 container and lid

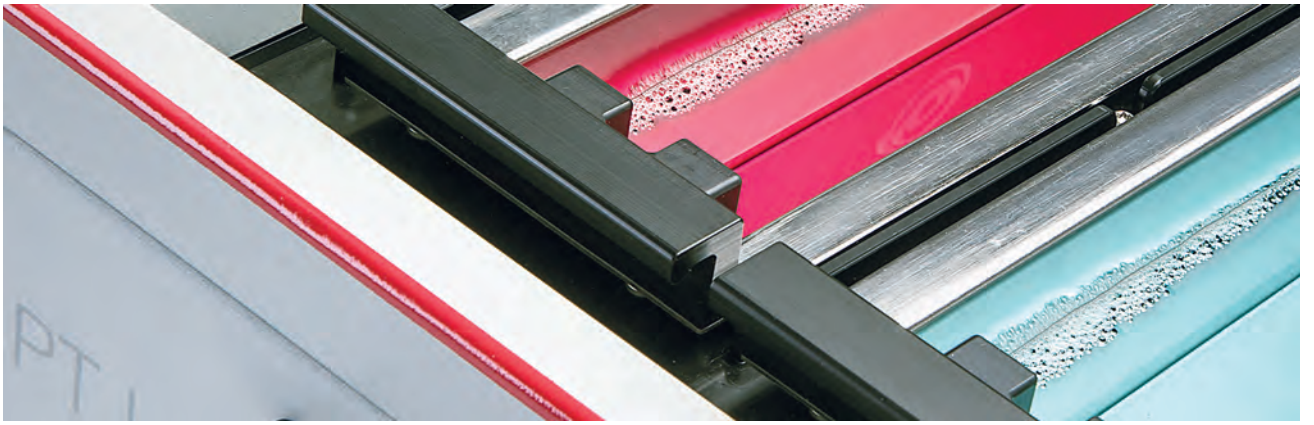
This container is for the working solution of Dako Wash Buffer (10x), Code S3006, used for the rinse step in the 3-in-1 pre-treatment procedure for deparaffinization, rehydration and epitope retrieval. The container should be used in conjunction with PT Link, Code PT100/PT101/PT200. The container holds two Autostainer slide racks.

### Tank for PT Link

PT102 Replacement tank for PT100/PT101 1 unit
PT202 Replacement tank for PT200 **NEW** 1 unit

### Tank Cover for PT Link

PT103 Spare tank cover for PT100/PT101 1 unit
PT203 Spare tank cover for PT200 **NEW** 1 unit



# pharmDx Kits (Autostainer Link)

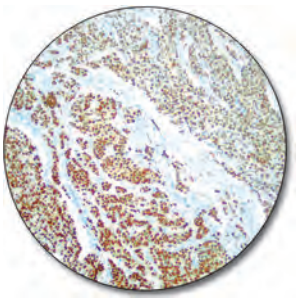
### ER/PR pharmDx Kit for Automated Link Platforms

IVD SK310 50 tests

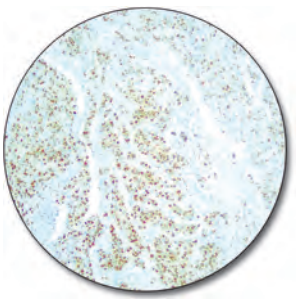
ER/PR pharmDx Kit is a semi-quantitative immunohistochemical kit system to identify estrogen receptor (ER) α protein and progesterone receptor (PR) protein expression in normal and neoplastic tissues. The assay specifically detects the ER α protein as well as the PR protein located in the cell nuclei of ER and PR-expressing cells, respectively. ER/PR pharmDx Kit is indicated as an aid in identifying patients eligible for treatment with anti-hormonal or aromatase inhibitor therapies as well as an aid in the prognosis and management of breast cancer.

The kit utilizes a simple two-step staining procedure and is suitable for formalin-fixed, paraffin-embedded specimens.

The kit provides all the reagents needed to run the ER/PR tests, including control slides to validate each run, and detailed instructions. A scoring guideline is included to facilitate interpretation.



*Estrogen receptor (FFPE) stained with ER/PR pharmDx Kit.*



*Progesterone receptor (FFPE) stained with ER/PR pharmDx Kit.*

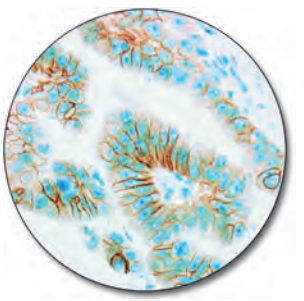
### HercepTest for Automated Link Platforms

IVD SK001 50 tests

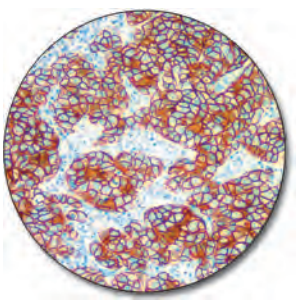
HercepTest is a semi-quantitative immunohistochemical assay for determination of HER2 protein (c-erbB-2 oncoprotein) overexpression in breast cancer tissues routinely processed for histological evaluation and formalin-fixed, paraffin-embedded cancer tissue from patients with metastatic gastric or gastroesophageal junction adenocarcinoma. HercepTest specifically demonstrates overexpression of HER2 protein. HercepTest is indicated as an aid in the assessment of breast and gastric cancer patients for whom Herceptin® (trastuzumab) treatment is being considered and for breast cancer patients for whom PERJETA™ (pertuzumab) or KADCYLA™ (ado-trastuzumab emtansine) treatment is being considered (see Herceptin®, PERJETA™, and KADCYLA™ package inserts).

The kit includes reagents required for the immunohistochemical staining (except wash buffer), control slides representing different expression levels of HER2 protein, and detailed instructions. SK001 has been tailored especially for use on Autostainer Link instruments.

HercepTest™, Herceptin®, PERJETA™, and KADCYLA™ are trademarks owned by Genentech, Inc. and/or F. Hoffmann-La Roche Ltd.; HercepTest™ is subject to an exclusive trademark license to Dako Denmark A/S.



*Gastric adenocarcinoma (FFPE) stained with HercepTest, 3+ staining.*



*Breast carcinoma (FFPE) stained with HercepTest, 3+ staining.*

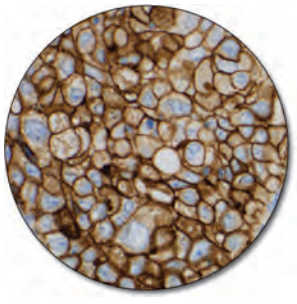
### PD-L1 IHC 22C3 pharmDx for Autostainer Link 48

IVD SK006 For Autostainer Link 48 **NEW** 50 tests

PD-L1 IHC 22C3 pharmDx is a qualitative immunohistochemical assay using Monoclonal Mouse Anti-PD-L1, Clone 22C3 intended for use in the detection of PD-L1 protein in formalin-fixed, paraffin-embedded (FFPE) non-small cell lung cancer (NSCLC) tissue using EnVision FLEX visualization system on Autostainer Link 48. PD-L1 protein expression is determined by using Tumor Proportion Score (TPS), which is the percentage of viable tumor cells showing partial or complete membrane staining. The specimen should be considered PD-L1 positive if TPS ≥ 50% of the viable tumor cells exhibit membrane staining at any intensity.
PD-L1 IHC 22C3 pharmDx is indicated as an aid in identifying NSCLC patients for treatment with KEYTRUDA® (pembrolizumab).

*PD-L1 IHC 22C3 pharmDx kit*
The kit includes reagents required for the immunohistochemical staining (except wash buffer), control slides representing different expression levels of PD-L1 protein, and detailed instructions. The kit has been tailored especially for use on Autostainer Link 48 instruments. The materials provided are sufficient for 50 tests (50 slides incubated with monoclonal mouse antibody to PD-L1 and 50 slides incubated with the corresponding negative control reagent, 100 slides in total).

Reference:
1. Garon EB, Rizvi NA, Hui R, Leighl N, Balmanoukian AS, Eder JP, et al. Pembrolizumab for the treatment of non-small cell lung cancer. New Eng J Med 2015;372:2018-28.



*Non-small cell lung carcinoma (FFPE) with PD-L1 High Expression stained with PD-L1 IHC 22C3 pharmDx, Code SK006. PD-L1 expression ≥ 50%*

### PD-L1 IHC 28-8 pharmDx for Autostainer Link 48

IVD SK005 For Autostainer Link 48 **NEW** 50 tests

PD-L1 IHC 28-8 pharmDx is a qualitative immunohistochemical assay using Monoclonal Rabbit Anti-PD-L1, Clone 28-8 intended for use in the detection of PD-L1 protein in formalin-fixed paraffin-embedded (FFPE) non-squamous non-small cell lung cancer (NSCLC) and melanoma tissues using EnVision FLEX visualization system on Autostainer Link 48. PD-L1 protein expression is defined as the percentage of tumor cells exhibiting positive membrane staining at any intensity.

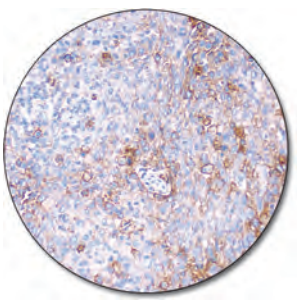
*Non-squamous NSCLC*
PD-L1 expression as detected by PD-L1 IHC 28-8 pharmDx in non-squamous NSCLC may be associated with enhanced survival from OPDIVO® (nivolumab).

*Melanoma*
Positive PD-L1 status as determined by PD-L1 IHC 28-8 pharmDx in melanoma is correlated with the magnitude of the treatment effect on progression-free survival from OPDIVO®.

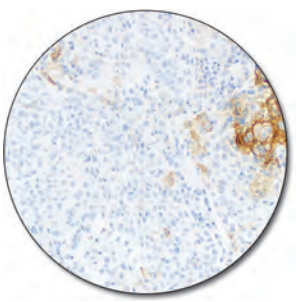
*PD-L1 IHC 28-8 pharmDx kit*
The kit includes reagents required for the immunohistochemical staining (except wash buffer), control slides representing different expression levels of PD-L1 protein, and detailed instructions. The kit has been tailored especially for use on Autostainer Link 48 instruments. The materials provided are sufficient for 50 tests (50 slides incubated with monoclonal rabbit antibody to PD-L1 and 50 slides incubated with the corresponding Negative Control Reagent, 100 slides in total).

PD-L1 IHC 28-8 pharmDx is subject to an exclusive trademark license to Dako Denmark A/S. OPDIVO® is a trademark owned by Bristol-Myers Squibb.

Reference:
1. Phillips T, Simmons P, Inzunza HD, Cogswell J, Novotny J Jr, Taylor C, et al. Development of an automated PD-L1 immunohistochemistry (IHC) assay for non-small cell lung cancer. Appl Immunohistochem Mol Morphol 2015. Aug 25. [Epub ahead of print]



*Non-squamous NSCLC (FFPE) stained with PD-L1 IHC 28-8 pharmDx, Code SK005. PD-L1 expression ≥ 10%.*



*Melanoma (FFPE) stained with PD-L1 IHC 28-8 pharmDx, Code SK005. PD-L1 expression ≥ 1%.*

**Go to page 139 to read about all our pharmDx products.**

# Primary Antibodies (FLEX Ready-to-Use) (Autostainer Link)

FLEX Ready-to-Use (RTU) antibodies are pre-diluted primary antibodies specifically developed for automated use while maintaining the high-quality staining performance for which Dako antibodies is known. Each FLEX RTU antibody has been developed with focus on delivering a consistent, high-quality staining performance with just one flexible staining protocol. The staining performance of all antibodies has been defined, tested and approved through collaboration with leading international pathologists.

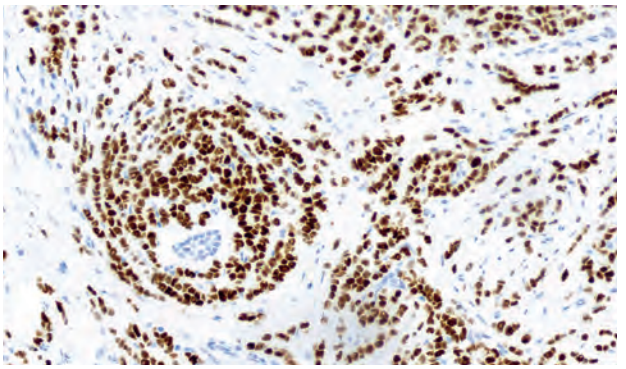
For each FLEX RTU antibody, one protocol is recommended to obtain optimal staining results. The quality of the stainings has been reviewed by a group of expert pathologists. In our Atlas of Stains guide book, we present staining images of high and low-expression structures as well as of recommended control tissues.

### FLEX RTU Antibodies

Dako FLEX RTU antibody selection together with the easy-to-use Dako EnVision FLEX/FLEX+ Visualization Systems (1) provides:

- Efficient epitope retrieval
- High-quality antibodies/clones
- Optimal antibody dilution
- Optimal visualization system
- Unique reference document: Dako Atlas of Stains (2)

The IR-Series FLEX Ready-to-Use Primary Antibodies listed in this section are packaged in Universal Reagent Vials for use on Autostainer Link instruments, and can only be used with EnVision FLEX and EnVision FLEX+ Visualization Systems.



### High-Quality Antibodies

Empirical data from the quality assurance organization, NordiQC, published on their Web site (3), shows that applying high-quality antibodies/clones brings staining results to a higher level. Clone quality, combined with a high degree of protocol standardization, delivers lower error rates and higher staining quality.

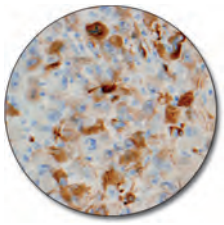
| Antibody Name | Clone | Optimal/Good | No. Samples |
|---|---|---|---|
| AMACR | 13H4 | 100 % | 5 |
| BCL2 Oncoprotein | 124 | 100 % | 14 |
| B-Cell-Specific Activator Protein | DAK-Pax5 | 95 % | 21 |
| CD10 | 56C6 | 98 % | 47 |
| CD15 | CARB-3 | 96 % | 49 |
| CD31 | JC70A | 97 % | 34 |
| CD45, Leucocyte Common Antigen | 2B11 + PD 7/26 | 100 % | 31 |
| Cytokeratin 18 | DC10 | 100 % | 15 |
| Cytokeratin 20 | Ks20.8 | 100 % | 25 |
| Ki-67 | MIB-1 | 97 % | 38 |
| MutL Protein Homolog 1 | ES05 | 92 % | 27 |
| Podoplanin | D2-40 | 100 % | 15 |
| Progesterone Receptor | Pgr 636 | 96 % | 78 |

NordiQC Pass Rate Overview (3). In a sample of top antibodies, Dako FLEX RTU antibodies deliver high pass rate.

References:
1. Skaland I, Nordhus M, Gudlaugsson E, Klos J, Kjellevold KH, Janssen EA, et al. Evaluation of 5 different labeled polymer immunohistochemical detection systems. Appl Immunohistochem Mol Morphol 2010;18:90-6.
2. Atlas of Stains - 4th edition, Dako Order No. 00230.
3. Test results from www.nordiqc.org/Assessments.htm.

Monoclonal Mouse Anti-Human
**Actin (Muscle)**

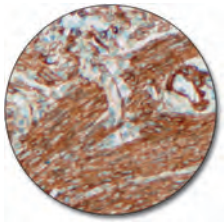
IVD IR700 Clone HHF35 60 tests, 12 mL



*Rhabdomyosarcoma (FFPE) stained with FLEX Anti-Actin (Muscle), Code IR700/IS700.*

Monoclonal Mouse Anti-Human
**Actin (Smooth Muscle)**

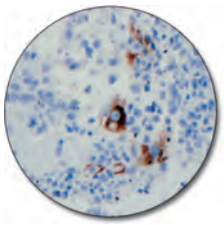
IVD IR611 Clone 1A4 60 tests, 12 mL



*Uterine leiomyoma (FFPE) stained with FLEX Anti-Actin (Smooth Muscle), Code IR611/IS611.*

Polyclonal Rabbit Anti-Human
**Alpha-1-Fetoprotein**

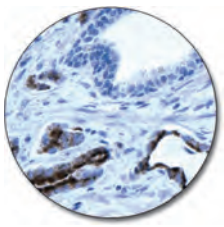
IVD IR500 60 tests, 12 mL



*Embryonal carcinoma (FFPE) stained with FLEX Anti-Alpha-1-Fetoprotein, Code IR500/IS500.*

Monoclonal Rabbit Anti-Human
**AMACR**

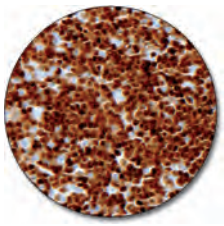
IVD IR060 Clone 13H4 60 tests, 12 mL



*Prostate adenocarcinoma (FFPE) stained with FLEX Anti-AMACR, Code IR060/IS060.*

Monoclonal Mouse Anti-Human
**B-Cell-Specific Activator Protein**

IVD IR650 Clone DAK-Pax5 60 tests, 12 mL



*B-cell chronic lymphatic leukemia (FFPE) stained with FLEX Anti-BSAP, Code IR650/IS650.*

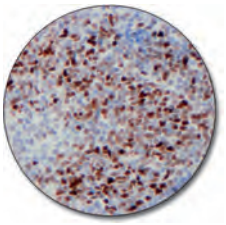
Monoclonal Mouse Anti-Human
**BCL2 Oncoprotein**

IVD IR614 Clone 124 60 tests, 12 mL

*Follicular lymphoma (FFPE) stained with FLEX Anti-BCL2 Oncoprotein, Code IR614/IS614.*

Monoclonal Mouse Anti-Human
**BCL6 Protein**

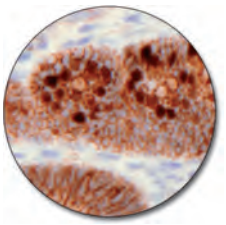
IVD IR625 Clone PG-B6p 60 tests, 12 mL



*Follicular lymphoma (FFPE) stained with FLEX Anti-BCL6 Protein, Code IR625/IS625.*

Monoclonal Mouse Anti-Human
**Beta-Catenin**

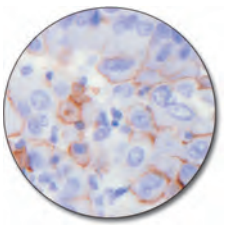
IVD IR702 Clone β-Catenin-1 60 tests, 12 mL



*Colon adenoma (FFPE) stained with FLEX Anti-Beta-Catenin, Code IR702/IS702.*

Monoclonal Mouse Anti-Human
**CA 125**

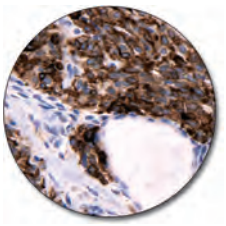
IVD IR701 Clone M11 60 tests, 12 mL



*Mesothelioma (FFPE) stained with FLEX Anti-CA 125, Code IR701/IS701.*

Polyclonal Rabbit Anti-Human
**Calcitonin**

IVD IR515 60 tests, 12 mL



*Thyroid medullary carcinoma (FFPE) stained with FLEX Anti-Calcitonin, Code IR515/IS515.*

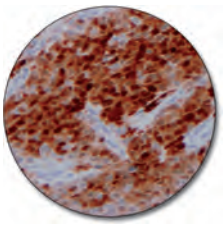
Monoclonal Mouse Anti-Human
**Caldesmon**

IVD IR054 Clone h-CD 60 tests, 12 mL

*Leiomyosarcoma (FFPE) stained with FLEX Anti-Caldesmon, Code IR054/IS054.*

Monoclonal Mouse Anti-Human
**Calretinin**

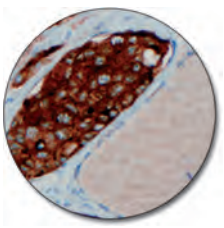
IVD IR627 Clone DAK-Calret 1 60 tests, 12 mL



*Granulosa cell tumor (FFPE) stained with FLEX Anti-Calretinin, Code IR627/IS627.*

Monoclonal Mouse Anti-Human
**Carcinoembryonic Antigen (CEA)**

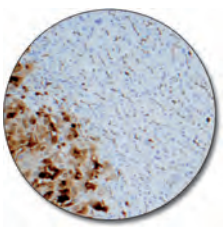
IVD IR622 Clone II-7 60 tests, 12 mL



*Medullary carcinoma (FFPE) stained with FLEX Anti-CEA, Code IR622/IS622.*

Polyclonal Rabbit Anti-Human
**Carcinoembryonic Antigen (CEA)**

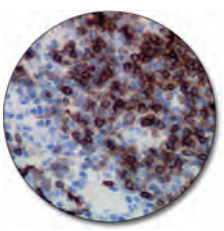
IVD IR526 60 tests, 12 mL



*Secondary adenocarcinoma (FFPE) stained with FLEX Anti-CEA, Code IR526/IS526.*

Monoclonal Mouse Anti-Human
**CD1a**

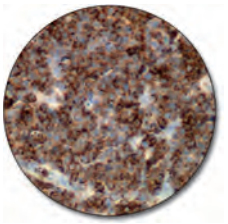
IVD IR069 Clone 010 60 tests, 12 mL



*Thymoma (FFPE) stained with FLEX Anti-CD1a, Code IR069/IS069.*

Monoclonal Mouse Anti-Human
**CD2**

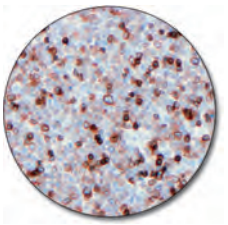
IVD IR651 Clone AB75 60 tests, 12 mL



*Precursor T-lymphoblastic lymphoma (FFPE) stained with FLEX Anti-CD2, Code IR651/IS651.*

Polyclonal Rabbit Anti-Human
**CD3**

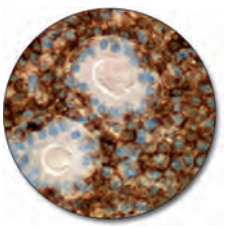
IVD IR503 60 tests, 12 mL



*Precursor T-lymphoblastic lymphoma (FFPE) stained with FLEX Anti-CD3, Code IR503/IS503.*

Monoclonal Mouse Anti-Human
**CD4**

IVD IR649 Clone 4B12 60 tests, 12 mL



*Anaplastic large cell lymphoma (FFPE) stained wit FLEX Anti-CD4, Code IR649/IS649.*

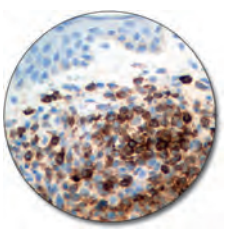
Monoclonal Mouse Anti-Human
**CD5**

IVD IR082 Clone 4C7 60 tests, 12 mL

*Mantle cell lymphoma (FFPE) stained with FLEX Anti-CD5, Code IR082/IS082.*

Monoclonal Mouse Anti-Human
**CD7**

IVD IR643 Clone CBC.37 60 tests, 12 mL

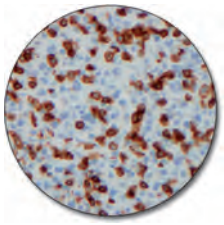


*Peripheral T-cell lymphoma (FFPE) stained with FLEX Anti-CD7, Code IR643/IS643.*

# Primary Antibodies (FLEX Ready-to-Use) (Autostainer Link) (continued)

Monoclonal Mouse Anti-Human
**CD8**

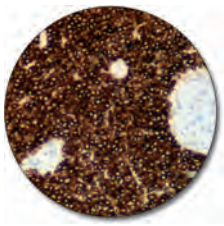
IVD IR623 Clone C8/144B 60 tests, 12 mL



*Peripheral T-cell lymphoma (FFPE) stained with FLEX Anti-CD8, Code IR623/IS623.*

Monoclonal Mouse Anti-Human
**CD10**

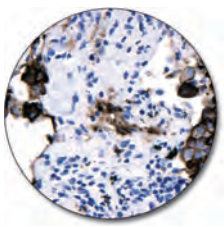
IVD IR648 Clone 56C6 60 tests, 12 mL



*Precursor B-lymphoblastic lymphoma (FFPE) stained with FLEX Anti-CD10, Code IR648/IS648.*

Monoclonal Mouse Anti-Human
**CD15**

IVD IR062 Clone Carb-3 60 tests, 12 mL



*Lung adenocarcinoma (FFPE) stained with FLEX Anti-CD15, Code IR062/IS062.*

Monoclonal Mouse Anti-Human
**CD19**

IVD IR656 Clone LE-CD19 60 tests, 12 mL

*B-cell chronic lymphatic leukemia (FFPE) stained with FLEX Anti-CD19, Code IR656/IS656.*

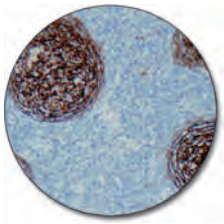
Monoclonal Mouse Anti-Human
**CD20cy**

IVD IR604 Clone L26 60 tests, 12 mL

*Mantle cell lymphoma (FFPE) stained with FLEX Anti-CD20cy, Code IR604/IS604.*

Monoclonal Mouse Anti-Human
**CD21**

IVD IR608 Clone 1F8 60 tests, 12 mL



*Follicular lymphoma (FFPE) stained with FLEX Anti-CD21, Code IR608/IS608.*

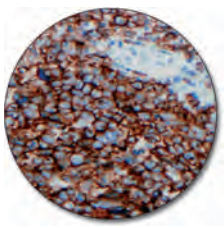
Monoclonal Mouse Anti-Human
**CD23**

IVD IR781 Clone DAK-CD23 60 tests, 12 mL

*B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma (FFPE) stained with FLEX Anti-CD23, Clone DAK-CD23, Code IR781/IS781.*

Monoclonal Mouse Anti-Human
**CD30**

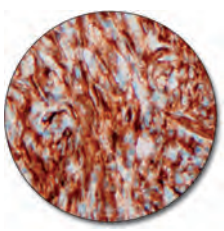
IVD IR602 Clone Ber-H2 60 tests, 12 mL



*Anaplastic large cell lymphoma (FFPE) stained with FLEX Anti-CD30, Code IR602/IS602.*

Monoclonal Mouse Anti-Human
**CD31, Endothelial Cell**

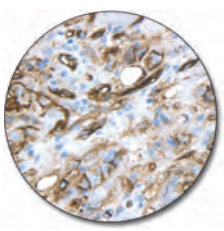
IVD IR610 Clone JC70A 60 tests, 12 mL



*Kaposi sarcoma (FFPE) stained with FLEX Anti-CD31, Code IR610/IS610.*

Monoclonal Mouse Anti-Human
**CD34 Class II**

IVD IR632 Clone QBEnd 10 60 tests, 12 mL

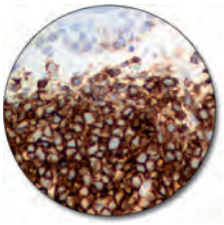


*Angiosarcoma (FFPE) stained with FLEX Anti-CD34 Class II, Code IR632/IS632.*

# Primary Antibodies (FLEX Ready-to-Use) (Autostainer Link) (continued)

Monoclonal Mouse Anti-Human
**CD43**

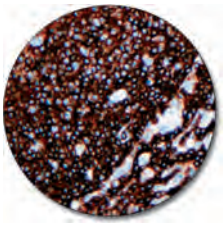
IVD IR636 Clone DF-T1 60 tests, 12 mL



*Peripheral B-cell lymphoma (FFPE) stained with FLEX Anti-CD43, Code IR636/IS636.*

Monoclonal Mouse Anti-Human
**CD45, Leucocyte Common Antigen**

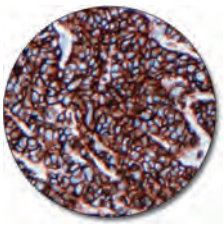
IVD IR751 Clones 2B11 + PD7/26 60 tests, 12 mL



*B-cell chronic lymphatic leukemia (FFPE) stained with FLEX Anti-CD45, Code IR751/IS751.*

Monoclonal Mouse Anti-Human
**CD56**

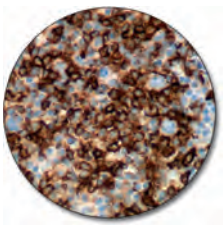
IVD IR628 Clone 123C3 60 tests, 12 mL



*Small cell carcinoma (FFPE) stained with FLEX Anti-CD56, Code IR628/IS628.*

Monoclonal Mouse Anti-Human
**CD57**

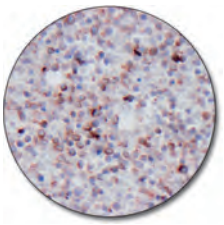
IVD IR647 Clone TB01 60 tests, 12 mL



*Hodgkin lymphoma (LP subtype) (FFPE) stained with FLEX Anti-CD57, Code IR647/IS647.*

Monoclonal Mouse Anti-Human
**CD68**

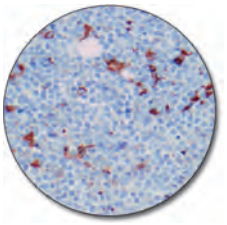
IVD IR609 Clone KP1 60 tests, 12 mL



*Acute myeloid leukemia (FAB Type M1) (FFPE) stained with FLEX Anti-CD68, Code IR609/IS609.*

Monoclonal Mouse Anti-Human
**CD68**

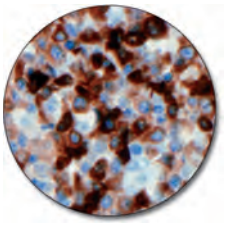
IVD IR613 Clone PG-M1 60 tests, 12 mL



*Acute myeloid leukemia (FAB Type M1) (FFPE) stained with FLEX Anti-CD68, Code IR613/IS613.*

Monoclonal Mouse Anti-Human
**CD79α**

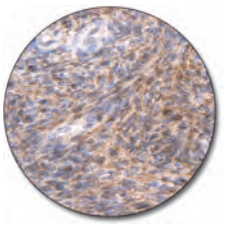
IVD IR621 Clone JCB117 60 tests, 12 mL



*Plasmacytoma (FFPE) stained with FLEX Anti-CD79α, Code IR621/IS621.*

Monoclonal Mouse Anti-Human
**CD99, MIC2 Gene Products, Ewing's Sarcoma Marker**

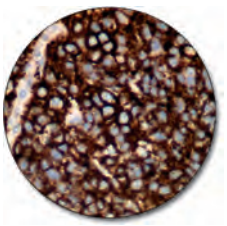
IVD IR057 Clone 12E7 60 tests, 12 mL



*Granulosa cell tumor (FFPE) stained with FLEX Anti-CD99, Code IR057/IS057.*

Monoclonal Mouse Anti-Human
**CD138**

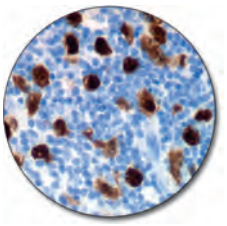
IVD IR642 Clone MI15 60 tests, 12 mL



*Myeloma (FFPE) stained with FLEX Anti-CD138, Code IR642/IS642.*

Monoclonal Mouse Anti-Human
**CD246, ALK Protein**

IVD IR641 Clone ALK1 60 tests, 12 mL

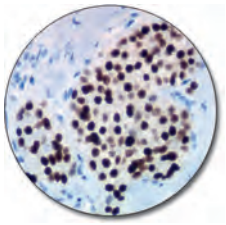


*Anaplastic large cell lymphoma (FFPE) stained with FLEX Anti-CD246, ALK Protein, Code IR641/IS641.*

# Primary Antibodies (FLEX Ready-to-Use) (Autostainer Link) (continued)

Monoclonal Mouse Anti-Human
**CDX2**

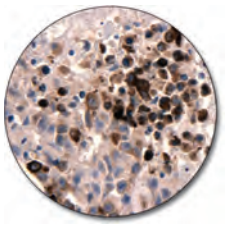
IVD IR080 Clone DAK-CDX2 60 tests, 12 mL



*Carcinoids (FFPE) stained with FLEX Anti-CDX2, Code IR080/IS080.*

Polyclonal Rabbit Anti-Human
**Chorionic Gonadotropin (hCG)**

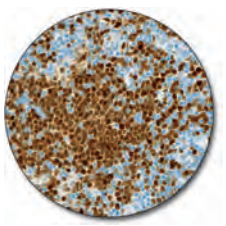
IVD IR508 60 tests, 12 mL



*Seminoma (FFPE) stained with FLEX Anti-hCG, Code IR508/IS508.*

Monoclonal Rabbit Anti-Human
**Cyclin D1**

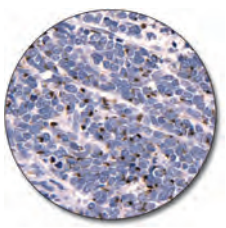
IVD IR083 Clone EP12 60 tests, 12 mL
R



*Mantle cell lymphoma (FFPE) stained with FLEX Anti-Cyclin D1, Code IR083/IS083.*

Monoclonal Mouse Anti-Human
**Cytokeratin**

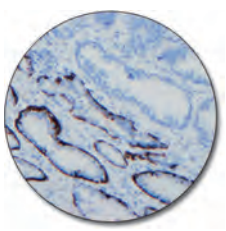
IVD IR053 Clone AE1/AE3 60 tests, 12 mL



*Merkel cell tumor (FFPE) stained with FLEX Anti-Cytokeratin, Code IR053/IS053.*

Monoclonal Mouse Anti-Human
**Cytokeratin 5/6**

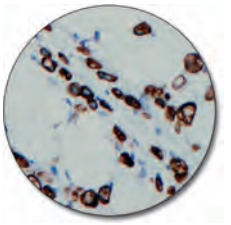
IVD IR780 Clone D5/16 B4 60 tests, 12 mL



*Prostate hyperplasia and carcinoma (FFPE) stained with FLEX Anti-Cytokeratin 5/6, Code IR780/IS780.*

Monoclonal Mouse Anti-Human
**Cytokeratin 7**

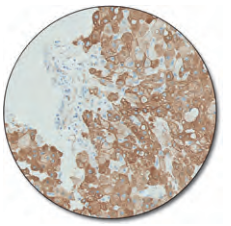
IVD IR619 Clone OV-TL 12/30 60 tests, 12 mL



*Breast lobular (FFPE) stained with FLEX Anti-Cytokeratin 7, Code IR619/IS619.*

Monoclonal Rabbit Anti-Human
**Cytokeratin 8/18**

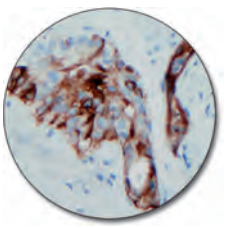
IVD IR094 Clone EP17/EP30 60 tests, 12 mL



*Hepatocellular carcinoma (FFPE) stained with FLEX Anti-Cytokeratin 8/18, Code IR094.*

Monoclonal Mouse Anti-
**Cytokeratin 17**

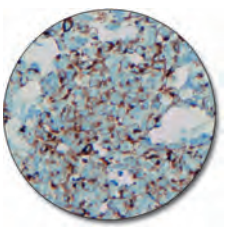
IVD IR620 Clone E3 60 tests, 12 mL



*Pancreatic adenocarcinoma (FFPE) stained with FLEX Anti-Cytokeratin 17, Code IR620/IS620.*

Monoclonal Mouse Anti-Human
**Cytokeratin 18**

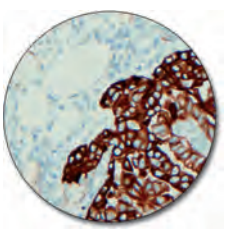
IVD IR618 Clone DC 10 60 tests, 12 mL



*Merkel cell carcinoma (FFPE) stained with FLEX Anti-Cytokeratin 18, Code IR618/IS618.*

Monoclonal Mouse Anti-Human
**Cytokeratin 19**

IVD IR615 Clone RCK108 60 tests, 12 mL

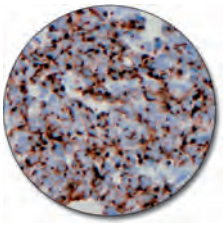


*Thyroid papillary carcinoma (FFPE) stained with FLEX Anti-Cytokeratin 19, Code IR615/IS615.*

# Primary Antibodies (FLEX Ready-to-Use) (Autostainer Link) (continued)

Monoclonal Mouse Anti-Human
**Cytokeratin 20**

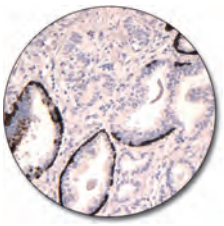
IVD IR777 Clone $K_s$20.8 60 tests, 12 mL



*Merkel cell carcinoma (FFPE) stained with FLEX Anti-Cytokeratin 20, Code IR777/IS777.*

Monoclonal Mouse Anti-Human
**Cytokeratin, High Molecular Weight**

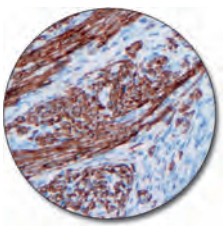
IVD IR051 Clone 34βE12 60 tests, 12 mL



*Prostate adenocarcinoma (FFPE) stained with FLEX Anti-Cytokeratin, High Molecular Weight, Code IR051/IS051.*

Monoclonal Mouse Anti-Human
**Desmin**

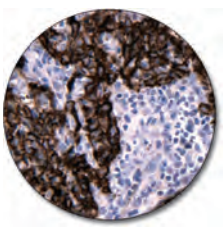
IVD IR606 Clone D33 60 tests, 12 mL



*Uterine leiomyoma (FFPE) stained with FLEX Anti-Desmin, Code IR606/IS606.*

Monoclonal Mouse Anti-Human
**E-Cadherin**

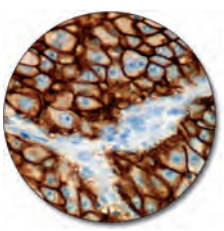
IVD IR059 Clone NCH-38 60 tests, 12 mL



*Breast ductal carcinoma (FFPE) stained with FLEX Anti-E-Cadherin, Code IR059/IS059.*

Monoclonal Mouse Anti-Human
**Epithelial Antigen**

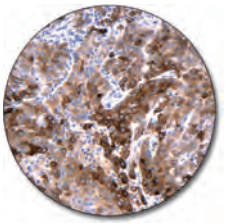
IVD IR637 Clone Ber-EP4 60 tests, 12 mL



*Lung adenocarcinoma (FFPE) stained with FLEX Anti-Epithelial Antigen, Code IR637/IS637.*

Monoclonal Mouse Anti-Human
**Epithelial Membrane Antigen (EMA)**

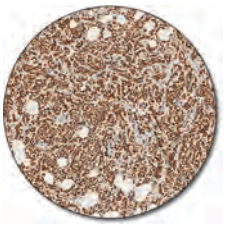
IVD IR629 Clone E29 60 tests, 12 mL



*Mesothelioma (FFPE) stained with FLEX Anti-EMA, Code IR629/IS629.*

Monoclonal Mouse Anti-Human
**ERCC1**

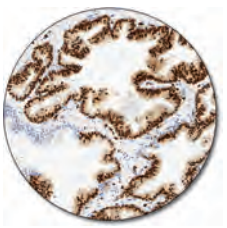
IVD IR091 Clone 4F9 60 tests, 12 mL



*Breast carcinoma (FFPE) stained with FLEX Anti-ERCC1, Code IR091.*

Monoclonal Rabbit Anti-Human
**ERG (Ets-Related Gene)**

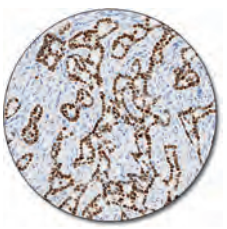
IVD IR659 Clone EP111 60 tests, 12 mL



*Prostate adenocarcinoma (FFPE) stained with FLEX Anti-ERG, Code IR659.*

Monoclonal Rabbit Anti-Human
**Estrogen Receptor α**

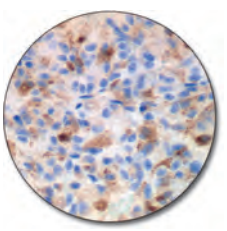
IVD IR084 Clone EP1 60 tests, 12 mL



*Breast tissue (FFPE) stained with FLEX Anti-Estrogen Receptor α, Clone EP1.*

Polyclonal Rabbit Anti-Human
**Gastrin**

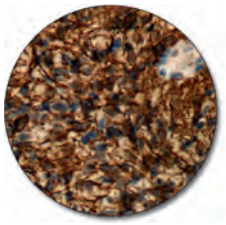
IVD IR519 60 tests, 12 mL



*Gastrin-producing tumor spread to the liver (FFPE) stained with FLEX Anti-Gastrin, Code IR519/IS519.*

Polyclonal Rabbit Anti-
**Glial Fibrillary Acidic Protein**

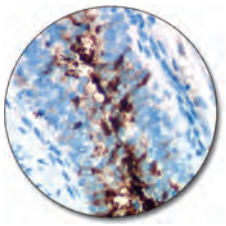
IVD IR524 60 tests, 12 mL



*Glioblastoma (FFPE) stained with FLEX Anti-GFAP, Code IR524/IS524.*

Monoclonal Mouse Anti-Human
**Gross Cystic Disease Fluid Protein-15**

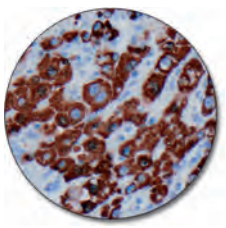
IVD IR077 Clone 23A3 60 tests, 12 mL



*Breast hyperplasia (FFPE) stained with FLEX Anti-GCDFP-15, Code IR077/IS077.*

Monoclonal Mouse Anti-Human
**Hepatocyte**

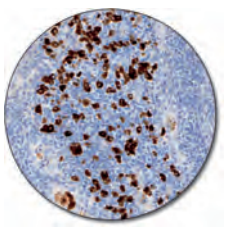
IVD IR624 Clone OCH1E5 60 tests, 12 mL



*Hepatocellular carcinoma (FFPE) stained with FLEX Anti-Hepatocyte, Code IR624/IS624.*

Polyclonal Rabbit Anti-Human
**IgA**

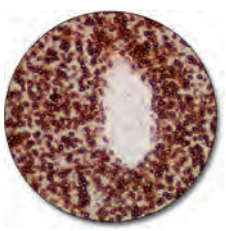
IVD IR510 60 tests, 12 mL



*Tonsil (FFPE) stained with FLEX Anti-IgA, Code IR510/IS510.*

Polyclonal Rabbit Anti-Human
**IgD**

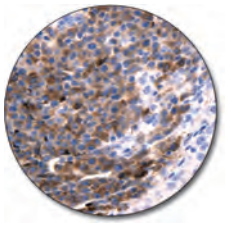
IVD IR517 60 tests, 12 mL



*Splenic marginal zone lymphoma (FFPE) stained with FLEX Anti-IgD, Code IR517/IS517.*

Polyclonal Rabbit Anti-Human
**IgG**

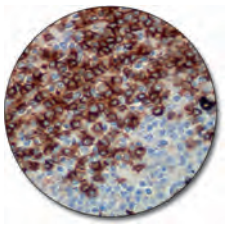
IVD IR512 60 tests, 12 mL



*Plasmacytoma IgG subtype (FFPE) stained with FLEX Anti-IgG, Code IR512/IS512.*

Polyclonal Rabbit Anti-Human
**IgM**

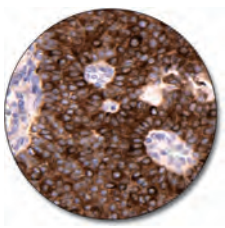
IVD IR513 60 tests, 12 mL



*Chronic lymphocytic leukemia IgM subtype (FFPE) stained with FLEX Anti-IgM, Code IR513/IS513.*

Monoclonal Mouse Anti-Human
**Inhibin α**

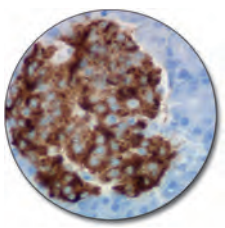
IVD IR058 Clone R1 60 tests, 12 mL



*Granulosa cell tumor (FFPE) stained with FLEX Anti-Inhibin α, Code IR058/IS058.*

Polyclonal Guinea Pig Anti-
**Insulin**

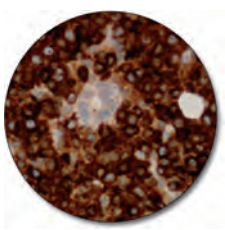
IVD IR002 60 tests, 12 mL



*Pancreas (FFPE) stained with FLEX Anti-Insulin, Code IR002/IS002.*

Polyclonal Rabbit Anti-Human
**Kappa Light Chains**

IVD IR506 60 tests, 12 mL

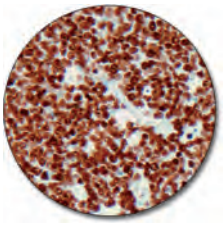


*Plasmacytoma (FFPE) stained with FLEX Anti-Kappa Light Chains, Code IR506/IS506.*

# Primary Antibodies (FLEX Ready-to-Use) (Autostainer Link) (continued)

Monoclonal Mouse Anti-Human
**Ki-67 Antigen**

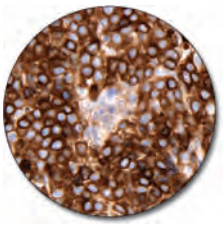
IVD IR626 Clone MIB-1 60 tests, 12 mL



*Burkitt lymphoma (FFPE) stained with FLEX Anti-Ki-67 Antigen, Code IR626/IS626.*

Polyclonal Rabbit Anti-Human
**Lambda Light Chains**

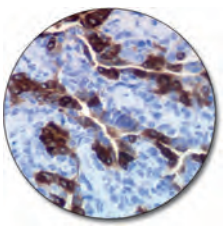
IVD IR507 60 tests, 12 mL



*Plasmacytoma (FFPE) stained with FLEX Anti-Lambda Light Chains, Code IR507/ IS507.*

Monoclonal Mouse Anti-Human
**Mammaglobin**

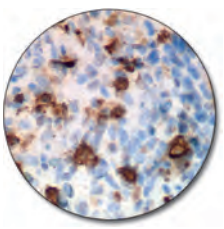
IVD IR074 Clone 304-1A5 60 tests, 12 mL



*Breast hyperplasia (FFPE) stained with FLEX Anti-Mammaglobin, Code IR074/IS074.*

Monoclonal Mouse Anti-Human
**Mast Cell Tryptase**

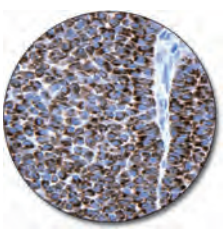
IVD IR640 Clone AA1 60 tests, 12 mL



*Mastocytosis in the subcutis (FFPE) stained with FLEX Anti-Mast Cell Tryptase, Code IR640/ IS640.*

Monoclonal Mouse Anti-Human
**Melan-A**

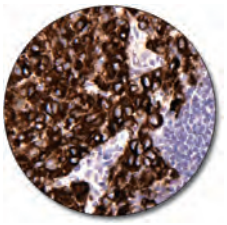
IVD IR633 Clone A103 60 tests, 12 mL



*Granulosa cell tumor (FFPE) stained with FLEX Anti-Melan-A, Code IR633/IS633.*

Monoclonal Mouse Anti-Human
**Melanosome**

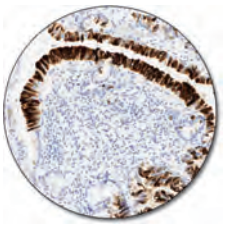
IVD IR052 Clone HMB-45 60 tests, 12 mL



*Metastatic melanoma (FFPE) stained with FLEX Anti-Melanosome, Code IR052/IS052.*

Monoclonal Mouse Anti-Human
**MUC2**

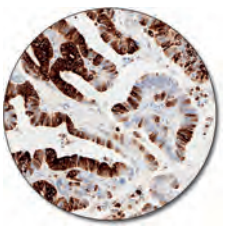
IVD IR658 Clone CCP58 60 tests, 12 mL



*Barrett's esophagus (FPPE) stained with FLEX Anti-MUC2, Code IR658.*

Monoclonal Mouse Anti-Human
**MUC5AC**

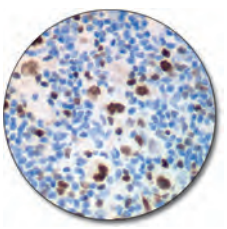
IVD IR661 Clone CLH2 60 tests, 12 mL



*Pancreas adenocarcinoma (FFPE) stained with FLEX Anti-MUC5AC, Clone CLH2, Code IR661.*

Monoclonal Mouse Anti-Human
**MUM1 Protein**

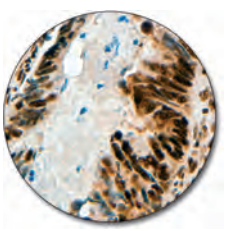
IVD IR644 Clone MUM1p 60 tests, 12 mL



*Classic Hodgkin's lymphoma, (FFPE) stained with FLEX Anti-MUM1 Protein, Code IR644/ IS644.*

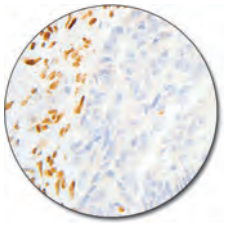
Monoclonal Mouse Anti-Human
**MutL Protein Homolog 1**

IVD IR079 Clone ES05 60 tests, 12 mL



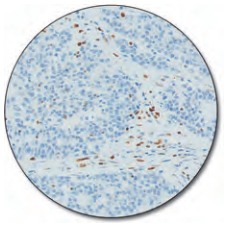
*Colon adenocarcinoma (FFPE) stained with FLEX Anti-MutL Protein Homolog 1, Code IR079/IS079.*

Monoclonal Mouse Anti-Human
**MutS Protein Homolog 2**
IVD IR085 Clone FE11 60 tests, 12 mL



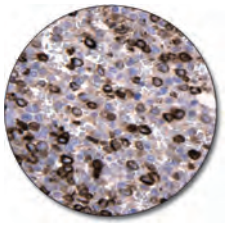
*Colon adenocarcinoma (FFPE) with loss of MSH2 protein stained with FLEX Anti-MSH2, Code IR085.*

Monoclonal Rabbit Anti-Human
**MutS Protein Homolog 6**
IVD IR086 Clone EP49 60 tests, 12 mL



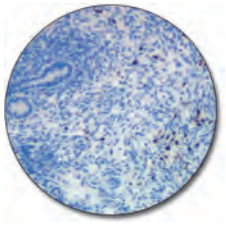
*Colon adenocarcinoma (FFPE) with loss of MSH6 protein stained with FLEX Anti-MSH6, Code IR086.*

Polyclonal Rabbit Anti-Human
**Myeloperoxidase**
IVD IR511 60 tests, 12 mL



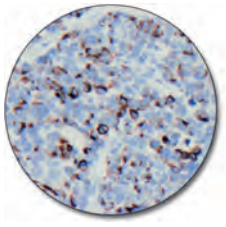
*Acute myeloid leukemia (FFPE) stained with FLEX Anti-Myeloperoxidase, Code IR511/IS511.*

Monoclonal Mouse Anti-
**Myogenin**
IVD IR067 Clone F5D 60 tests, 12 mL



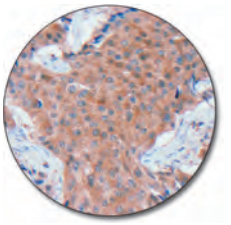
*Wilms' tumor (FFPE) stained with FLEX Anti-Myogenin, Code IR067/IS067.*

Monoclonal Mouse Anti-Human
**Neurofilament Protein**
IVD IR607 Clone 2F11 60 tests, 12 mL



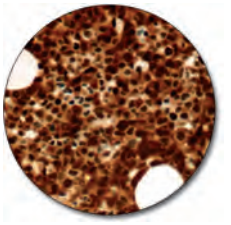
*Merkel cell carcinoma (FFPE) stained with FLEX Anti-Neurofilament Protein, Code IR607/IS607.*

Monoclonal Mouse Anti-Human
**Neuron-Specific Enolase (NSE)**
IVD IR612 Clone BBS/NC/VI-H14 60 tests, 12 mL



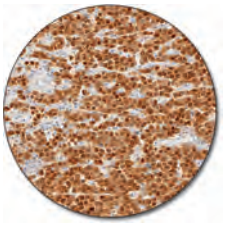
*Carcinoid tumor (FFPE) stained with FLEX Anti-NSE, Code IR612/IS612.*

Monoclonal Mouse Anti-Human
**Nucleophosmin**
IVD IR652 Clone 376 60 tests, 12 mL



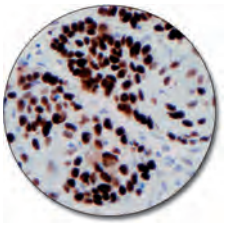
*Acute myeloid leukemia (FFPE) stained with FLEX Anti-Nucleophosmin, Code IR652.*

Monoclonal Mouse Anti-Human
**Octamer-Binding Transcription Factor 3/4**
IVD IR092 Clone N1NK 60 tests, 12 mL



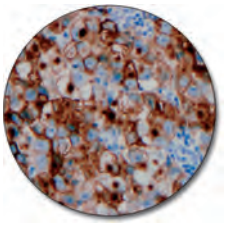
*Seminoma (FFPE) stained with FLEX Anti-OCT3/4, Code IR092.*

Monoclonal Mouse Anti-Human
**p53 Protein**
IVD IR616 Clone DO-7 60 tests, 12 mL



*Transitional cell carcinoma (FFPE) stained with FLEX Anti-p53 Protein, Code IR616/IS616.*

Monoclonal Mouse Anti-Human
**Placental Alkaline Phosphatase**
IVD IR779 Clone 8A9 60 tests, 12 mL

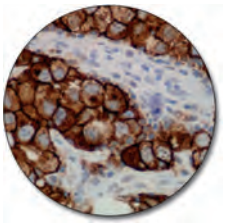


*Seminoma (FFPE) stained with FLEX Anti-Placental Alkaline Phosphatase, Code IR779/IS779.*

# Primary Antibodies (FLEX Ready-to-Use) (Autostainer Link) (continued)

Monoclonal Mouse Anti-Human
**Podoplanin**

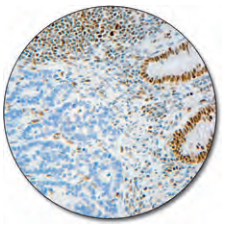
IVD IR072 Clone D2-40 60 tests, 12 mL



*Mesothelioma (FFPE) stained with FLEX Anti-Podoplanin, Code IR072/IS072.*

Monoclonal Rabbit Anti-Human
**Postmeiotic Segregation Increased 2**

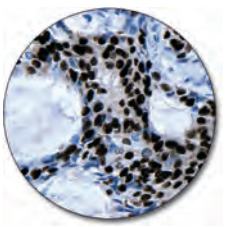
IVD IR087 Clone EP51 60 tests, 12 mL



*Colon adenocarcinoma (FFPE) with loss of PMS2 protein stained with FLEX Anti-PMS2, Code IR087.*

Monoclonal Mouse Anti-Human
**Progesterone Receptor**

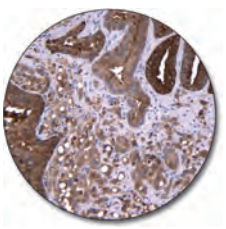
IVD IR068 Clone PgR 636 60 tests, 12 mL



*Breast ductal carcinoma (FFPE) stained with FLEX Anti-Progesterone Receptor, Code IR068.*

Polyclonal Rabbit Anti-Human
**Prostate-Specific Antigen (PSA)**

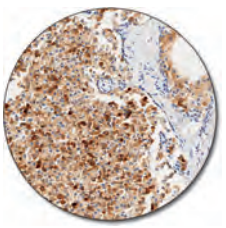
IVD IR514 60 tests, 12 mL



*Prostatic adenocarcinoma (FFPE) stained with FLEX Anti-PSA, Code IR514/IS514.*

Monoclonal Mouse Anti-Human
**Prostate-Specific Membrane Antigen**

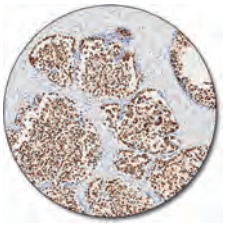
IVD IR089 Clone 3E6 60 tests, 12 mL



*Prostate adenocarcinoma (FFPE) stained with FLEX Anti-PSMA, Code IR089.*

Monoclonal Mouse Anti-Human
**Prostein**

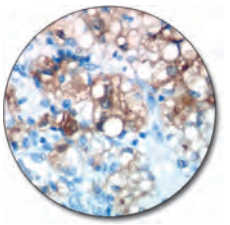
IVD IR088 Clone 10E3 60 tests, 12 mL



*Prostate adenocarcinoma (FPPE) stained with FLEX Anti-Prostein, Code IR088.*

Monoclonal Mouse Anti-Human
**Renal Cell Carcinoma Marker**

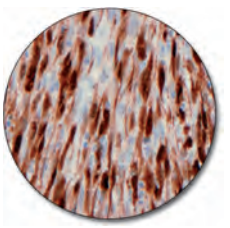
IVD IR075 Clone SPM314 60 tests, 12 mL



*Renal cell carcinoma (FFPE) stained with FLEX Anti-Renal Cell Carcinoma Marker, Code IR075/IS075.*

Polyclonal Rabbit Anti-
**S100**

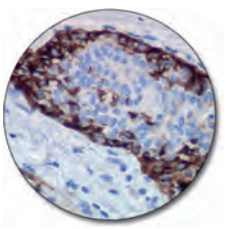
IVD IR504 60 tests, 12 mL



*Malignant melanoma (FFPE) stained with FLEX Anti-S100, Code IR504/IS504.*

Monoclonal Mouse Anti-Human
**Smooth Muscle Myosin Heavy Chain**

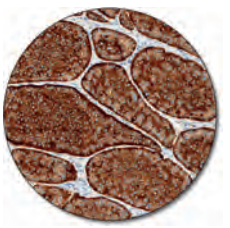
IVD IR066 Clone SMMS-1 60 tests, 12 mL



*Breast hyperplasia (FFPE) stained with FLEX Anti-Myosin Heavy Chain (Smooth Muscle), Code IR066/IS066.*

Monoclonal Mouse Anti-Human
**Synaptophysin**

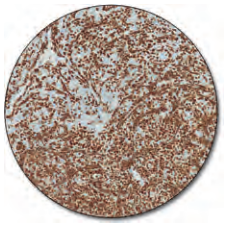
IVD IR660 Clone DAK-SYNAP 60 tests, 12 mL



*Small intestine carcinoid (FFPE) stained with FLEX Anti-Synaptophysin, Code IR660.*

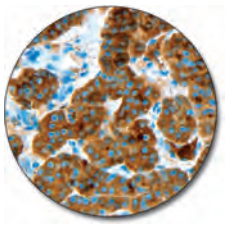
# Primary Antibodies (FLEX Ready-to-Use) (Autostainer Link) (continued)

Monoclonal Rabbit Anti-Human
**Terminal Deoxynucleotidyl Transferase (TdT)**
IVD IR093 Clone EP266 60 tests, 12 mL



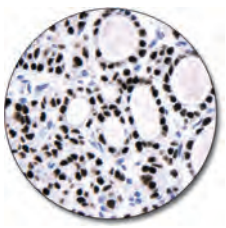
*Thymoma (FFPE) stained with FLEX Anti-TdT, Code IR093.*

Polyclonal Rabbit Anti-Human
**Thyroglobulin**
IVD IR509 60 tests, 12 mL



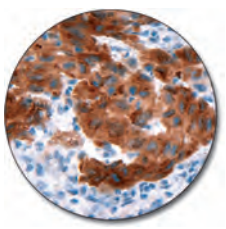
*Thyroid follicular carcinoma (FFPE) stained with FLEX Anti-Thyroglobulin, Code IR509/ IS509.*

Monoclonal Mouse Anti-
**Thyroid Transcription Factor (TTF-1)**
IVD IR056 Clone 8G7G3/1 60 tests, 12 mL



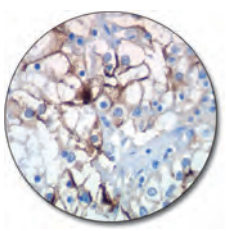
*Thyroid follicular carcinoma (FFPE) stained with FLEX Anti-TTF-1, Code IR056/IS056.*

Monoclonal Muose Anti-Human
**Tyrosinase**
IVD IR061 Clone T311 60 tests, 12 mL



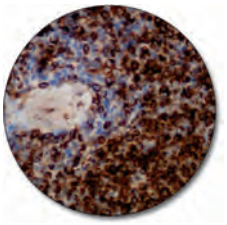
*Melanoma (FFPE) stained with FLEX Anti-Tyrosinase, Code IR061/IS061.*

Monoclonal Mouse Anti-
**Villin**
IVD IR076 Clone 1D2 C3 60 tests, 12 mL



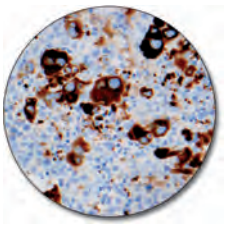
*Renal cell carcinoma (FFPE) stained with FLEX Anti-Villin, Code IR076/IS076.*

Monoclonal Mouse Anti-
**Vimentin**
IVD IR630 Clone V9 60 tests, 12 mL



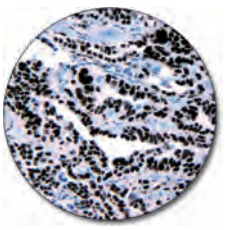
*B-cell chronic lymphocytic leukemia (FFPE) stained with FLEX Anti-Vimentin, Code IR630/ IS630.*

Polyclonal Rabbit Anti-Human
**Von Willebrand Factor**
IVD IR527 60 tests, 12 mL



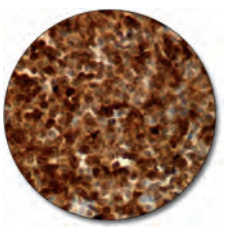
*Acute myeloid leukemia (FAB Type M7) (FFPE) stained with FLEX Anti-Von Willebrand Factor, Code IR527/IS527.*

Monoclonal Mouse Anti-Human
**Wilms' Tumor 1 (WT1) Protein**
IVD IR055 Clone 6F-H2 60 tests, 12 mL



*Serous ovarian adenocarcinoma (FFPE) stained with FLEX Anti-Wilms' Tumor 1 (WT1) Protein, Code IR055/IS055.*

Monoclonal Mouse Anti-Human
**ZAP-70**
IVD IR653 Clone 2F3.2 60 tests, 12 mL



*B-cell chronic lymphocytic leukemia (FFPE) stained with FLEX Anti-ZAP-70, Code IR653.*

# Negative Controls (FLEX Ready-to-Use) (Autostainer Link)

**Negative Control for IR-Series Mouse Primary Antibodies**

IVD IR750 Ready-to-use 120 tests, 24 mL

Universal negative control for all FLEX ready-to-use **mouse** primary antibodies for use on Automated Link instruments. Packaged in Universal Vial.

**Negative Control for IR-Series Rabbit Primary Antibodies**

IVD IR600 Ready-to-use 120 tests, 24 mL

Universal negative control for all FLEX ready-to-use **rabbit** primary antibodies for use on Automatedr Link instruments. Packaged in Universal Vial.

# Visualization Systems (EnVision FLEX) (Autostainer Link)

EnVision FLEX and FLEX+ visualization systems are one of the building blocks in the FLEX IHC solution. EnVision FLEX and FLEX+ kits have been validated and packaged to ensure the reagents are working optimally together. Furthermore, the EnVision FLEX and FLEX+ protocols are available in the software for Autostainer Link 48, and this concept of having only one protocol for each system adds another level of standardization. When combined with the FLEX RTU antibody series - which are optimized to one of the EnVision FLEX or FLEX+ protocols - an even further level of standardization is achieved. The result is robust and high-quality staining of the tissues. Customer usage has confirmed that EnVision FLEX and FLEX+ easily can be the preferred visualization system, e.g. Skaland et al.* have produced the below results in their laboratory.

| | Sensitivity Ranking No. | False Negative | Background Staining | TAT (minutes) | Overall Conclusion |
|---|---|---|---|---|---|
| EnVision FLEX+ | 1 | No | No | 259 | Best choice |
| EnVision FLEX | 2 | No | No | 224 | OK choice |
| EnVision | 2 | No | No | 224 | OK choice |
| Competitor Product 1 | 2 (mouse)<br>3 (rabbit) | Sometimes | Yes | 342 | Not the best choice |
| Competitor Product 2 | 4 | Sometimes | Yes | 308 | Not the best choice |

* Skaland I, Nordhus M, Gudlaugsson E, Klos J, Kjellevold KH, Janssen EA, et al. Evaluation of 5 different labeled polymer immunohistochemical detection systems. Appl Immunohistochem Mol Morphol 2010;18:90-6.

**EnVision FLEX, High pH (Link)**

IVD K8000 HRP. Rabbit/Mouse. High pH 400-600 tests

EnVision FLEX, High pH is a high-sensitivity visualization system intended for use in immunohistochemistry together with Autostainer Link Instruments. The dual link system detects primary mouse and rabbit antibodies and the reaction is visualized by DAB+ Chromogen. The convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer, Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9), and Wash Buffer (20x). EnVision FLEX convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Autostainer Link Instruments.

**EnVision FLEX Mini Kit, High pH (Link)**

IVD K8023 HRP. Rabbit/Mouse. High pH 125-190 tests

EnVision FLEX Mini Kit, High pH is a high-sensitivity visualization system intended for use in immunohistochemistry together with Autostainer Link Instruments. The dual link system detects primary mouse and rabbit antibodies and the reaction is visualized by DAB+ Chromogen. The convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer, Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9), and Wash Buffer (20x). EnVision FLEX convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Autostainer Link Instruments.

**EnVision FLEX+, Mouse, High pH (Link)**

IVD K8002 HRP. Mouse. High pH 400-600 tests

EnVision FLEX+, Mouse, High pH is a very-high-sensitivity visualization system intended for use in immunohistochemistry together with Autostainer Link Instruments. The EnVision FLEX+ Mouse (LINKER) amplifies the signal of primary mouse antibodies and the reaction is visualized by DAB+ Chromogen. In addition to the EnVision FLEX+ Mouse (LINKER) the convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer, Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9), and Wash Buffer (20x). The EnVision FLEX+ Rabbit (LINKER), Code K8009, is an optional EnVision FLEX reagent that may be used with EnVision FLEX and FLEX+ convenience kits to amplify the signal of primary rabbit antibodies. EnVision FLEX+ convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Autostainer Link Instruments.

# Optional Reagents (EnVision FLEX) (Autostainer Link)

**Antibody Diluent**

IVD K8006 Diluent 400-600 tests, 120 mL,

EnVision FLEX Antibody Diluent is an optional EnVision FLEX reagent and is recommended for the dilution of Dako concentrated Primary Antibodies. EnVision FLEX Antibody Diluent is compatible with all EnVision FLEX and FLEX+ convenience kits.

**Hematoxylin (Link)**

IVD K8008 Ready-to-use 400-600 tests, 3 x 45 mL

EnVision FLEX Hematoxylin is an optional EnVision FLEX reagent and is recommended for counterstaining. The reagent provides a clear blue, nuclear staining. EnVision FLEX Hematoxylin is compatible with EnVision FLEX and FLEX+ convenience kits.

**Mouse (LINKER) (Link)**

IVD K8021 Ready-to-use 130-200 tests, 40 mL

EnVision FLEX+ Mouse (LINKER) is an optional EnVision FLEX+ reagent and may be used with EnVision FLEX and FLEX+ convenience kits to amplify the signal of primary mouse antibodies.

**Rabbit (LINKER) (Link)**

IVD K8009 Ready-to-use 130-200 tests, 40 mL

EnVision FLEX+ Rabbit (LINKER) is an optional EnVision FLEX+ reagent and may be used with EnVision FLEX and FLEX+ convenience kits to amplify the signal of primary rabbit antibodies.

**Target Retrieval Solution, High pH**

IVD K8004 Concentrate 3 x 30 mL, 50x concentrated

EnVision FLEX Target Retrieval Solution, High pH is an optional EnVision FLEX reagent containing 50x concentrated Tris/EDTA, pH 9 and is compatible with all EnVision FLEX and FLEX+ convenience kits for both Autostainer Link Instruments and Dako Autostainer Instruments. One 30 mL bottle, when properly diluted, is enough to fill one PT Link tank.

**Target Retrieval Solution, Low pH**

IVD K8005 Concentrate 3 x 30 mL, 50x concentrated

EnVision FLEX Target Retrieval Solution, Low pH is an optional EnVision FLEX reagent containing 50x concentrated citrate buffer, pH 6.1 and is compatible with all EnVision FLEX and FLEX+ convenience kits for both Autostainer Link Instruments and Dako Autostainer Instruments. One 30 mL bottle, when properly diluted, is enough to fill one PT Link tank.

**Wash Buffer**

IVD K8007 Concentrate 1 L, 20x concentrated

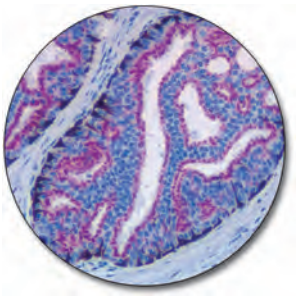
EnVision FLEX Wash Buffer is an optional EnVision FLEX reagent containing 20x concentrated wash buffer and is compatible with all EnVision FLEX and FLEX+ convenience kits for both Autostainer Link Instruments and Dako Autostainer Instruments.

# Doublestaining System (EnVision DuoFLEX) (Autostainer Link)

**EnVision DuoFLEX Doublestain System (Link)**

IVD SK110 HRP/AP, Rabbit/Mouse 100-150 tests, 30 mL

EnVision DuoFLEX Doublestain System is intended for use in immunohistochemistry together with Autostainer Link instruments. This system is useful for the simultaneous detection of multiple antigens present in low or high concentrations within one specimen. The visualization is based on peroxidase (HRP) using DAB+ as chromogen and alkaline phosphatase (AP) using Permanent Red as chromogen. EnVision DuoFLEX Doublestain System is biotin-free, thus significantly reducing non-specific staining resulting from endogenous avidin-biotin activity. This visualization system should be used for Dako DuoFLEX Cocktail antibodies.
Note: The number of tests is based on the use of 200 µL or 300 µL of reagent per slide.



*Prostate (FFPE) stained with DuoFLEX Cocktail Anti-AMACR + Anti-Cytokeratin HMW + Anti-Cytokeratin 5/6, Code IC004.*

# Autostainer Plus for IHC

Dako Autostainer Plus Staining System allows for staining procedures and processing of specimens to be performed automatically. The instrument is suited for immunostaining of tissue sections, cytospins and cell smears.

The system has four elements:

- **Autostainer Plus Instrument**
  The instrument is no longer available, but is still being supported
- **Autostainer Plus Software**
  The flexible and open software allows for creating and saving staining protocols. It does not provide means of connectivity to Laboratory Information System or Local Area Network
- **Reagents**
  A dedicated line of FLEX ready-to-use reagents gives high quality staining results
- **Slide Labeling System**
  Slide labels can be printed from the Autostainer Plus software

## Ancillaries and Accessories (Dako Autostainer)

### Accessory Utensils

| | | | |
|---|---|---|---|
| | S3424 | Dako Autostainer Reagent Racks, One White/One Blue | 2 racks |
| | S3425 | Dako Autostainer Reagent Vials | 100 vials |
| | S3704 | Dako Autostainer Slide Racks | 4 racks |

### AEC+ Substrate-Chromogen

| | | | |
|---|---|---|---|
| IVD | K3461 | Ready-to-use | 150 tests, 15 mL |
| IVD | K3469 | Ready-to-use | 1100 tests, 110 mL |

AEC+ Substrate-Chromogen is especially useful in applications requiring high sensitivity. It is suitable for use in peroxidase-based immunohistochemical staining methods. AEC (3-amino-9-ethylcarbazole) forms a red end-product at the site of the target antigen. AEC must be used together with aqueous mounting fluids.

### Clear-It Cleaning Reagent for Dako Autostainer

| | | | |
|---|---|---|---|
| IVD | SL002 | | 3.8 L |

This reagent is suitable for cleaning the Dako Autostainer sink and reservoir after performing histological stains.

### DAB+, Liquid

| | | | |
|---|---|---|---|
| IVD | K3468 | | 10 x 11 mL△ |

Liquid DAB+ is a high sensitivity substrate-chromogen system for use in peroxidase-based immunohistochemical staining methods. DAB (diaminobenzidine) forms a very stable, brown end-product at the site of the target antigen. DAB may be used together with mounting fluids containing organic solvents.

### DAB-Away®, Cleaning Agent

| | | | |
|---|---|---|---|
| IVD | S1967 | DAB chromogen removal system | 50 tests, 250 mL |

For cleaning of glassware, parts and surfaces that have come in contact with 3,3'-diaminobenzidine (DAB). Is recommended for routine cleaning of the Dako Autostainer probe and surfaces. Contains materials sufficient for 250 mL of cleaning reagent working solution and 250 mL of decolorizer.

### Hematoxylin

| | | | |
|---|---|---|---|
| IVD | S3301 | | 500 mL |

Developed for use with the Dako Autostainer.

### IHC Microscope Slides, FLEX

| | | | |
|---|---|---|---|
| IVD | K8020 | Coated glass slides | 5 x 100 slides |

Coated microscope slides for adhesion of formalin-fixed, paraffin-embedded tissue sections for use in immunohistochemistry with Dako EnVision FLEX visualization systems. FLEX IHC Microscope Slides are compatible with, but not limited to, the following Dako instruments: Dako Omnis, Autostainer Link, Dako Autostainer/Autostainer Plus and PT Link.

### Peroxidase and Alkaline Phosphatase Blocking Reagent (Dual Endogenous Enzyme-Blocking Reagent)

| | | | |
|---|---|---|---|
| IVD | S2003 | | 10 x 11 mL△ |

Suppresses endogenous alkaline phosphatase and peroxidase in cell preparations, frozen tissue sections, and formalin-fixed, paraffin-embedded tissue sections.

### Proteinase K

| | | | |
|---|---|---|---|
| IVD | S3020 | Ready-to-use | 10 x 11 mL△ |

Proteinase K is intended for proteolytic epitope retrieval in formalin-fixed, paraffin-embedded tissues prior to immunohistochemical procedures.

### Proteolytic Enzyme

| | | | |
|---|---|---|---|
| IVD | S3007 | Ready-to-use | 10 x 11 mL△ |

Proteolytic Enzyme, Ready-to-Use, is intended for the proteolytic digestion of formalin-fixed, paraffin-embedded tissues, cell blocks or cell specimens prior to immunohistochemical (IHC) or in situ hybridization (ISH) procedures. Proteolytic digestion of formalin-fixed tissues improves accessibility of antibodies and DNA probes to target sites within tissues. In IHC, proteolytic digestion exposes certain epitopes which have been masked during fixation. In ISH procedures, accessibility of DNA sequences is enhanced allowing better probe penetration and hybridization.

### Wash Buffer 10x

| | | | |
|---|---|---|---|
| IVD | S3006 | Concentrate | 1 L, 10x concentrated |

Tris-buffered saline solution containing 0.05% Tween 20, pH 7.6. Well-suited for use in manual and automated immunohistochemical staining protocols.

△ Packaged in vials for use with Dako Autostainer instruments

# pharmDx Kits (Dako Autostainer)

### c-Kit pharmDx for Dako Autostainer

IVD K1907 35 tests

c-Kit pharmDx is a qualitative immunohistochemical kit system for the identification of c-kit (CD117) protein expression in normal and neoplastic tissues. c-Kit pharmDx is indicated as an aid in the differential diagnosis of gastrointestinal stromal tumors (GIST). Accurate assessment of c-kit protein expression is now a critical factor in the diagnosis of GIST and is becoming increasingly important in influencing decisions regarding clinical management, including the use of Gleevec®/Glivec® (imatinib mesylate) for the treatment of patients with confirmed GIST.
c-Kit pharmDx utilizes a simple two-step staining procedure and is suitable for formalin-fixed, paraffin-embedded specimens. The kit includes ready-to-use primary antibody, negative control reagent, cell line control slides and detailed instructions. The kit has been tailored especially for use on the Dako Autostainer.

### EGFR pharmDx Kit for Dako Autostainer

IVD K1494 50 tests

EGFR pharmDx Kit is a qualitative immunohistochemical kit system that includes all reagents necessary to identify expression of epidermal growth factor receptor (EGFR) protein on the surface of normal and neoplastic cells. EGFR protein is also called HER1 protein. Through the use of standard methods and reagents, EGFR pharmDx Kit will provide reproducible results from laboratory to laboratory. EGFR is indicated as an aid in identifying colorectal cancer patients eligible for treatment with Erbitux® (cetuximab) or Vectibix™ (panitumumab). The kit utilizes a simple two-step staining procedure and is suitable for formalin-fixed, paraffin-embedded specimens. Results can be available within 1 day, giving clinicians EGFR expression levels in a quick and reliable manner. The kit has been designed for use on the Dako Autostainer.

### ER/PR pharmDx Kit for the Dako Autostainer

IVD K4071 50 tests

ER/PR pharmDx Kit is a semi-quantitative immunohistochemical kit system to identify estrogen receptor (ER) α protein and progesterone receptor (PR) protein expression in normal and neoplastic tissues. The assay specifically detects the ER α protein as well as the PR protein located in the cell nuclei of ER and PR-expressing cells, respectively. ER/PR pharmDx Kit is indicated as an aid in identifying patients eligible for treatment with anti-hormonal or aromatase inhibitor therapies as well as an aid in the prognosis and management of breast cancer.
The kit utilizes a simple two-step staining procedure and is suitable for formalin-fixed, paraffin-embedded specimens. The kit provides all the reagents needed to run the ER/PR tests, including control slides to validate each run, and detailed instructions. A scoring guideline is included to facilitate interpretation.

### HercepTest for Dako Autostainer

IVD K5207 50 tests

HercepTest is a semi-quantitative immunohistochemical assay for determination of HER2 protein (c-erbB-2 oncoprotein) overexpression in breast cancer tissues routinely processed for histological evaluation and formalin-fixed, paraffin-embedded cancer tissue from patients with metastatic gastric or gastroesophageal junction adenocarcinoma. HercepTest specifically demonstrates overexpression of HER2 protein. HercepTest is indicated as an aid in the assessment of breast and gastric cancer patients for whom Herceptin® (trastuzumab) treatment is being considered and for breast cancer patients for whom PERJETA™ (pertuzumab) or KADCYLA™ (ado-trastuzumab emtansine) treatment is being considered (see Herceptin®, PERJETA™, and KADCYLA™ package inserts).
K5207 has been tailored especially for use on Dako Autostainer.



**Go to page 139 to read about all our pharmDx products.**

# Primary Antibodies (FLEX Ready-to-Use) (Dako Autostainer)

The IS-Series FLEX Ready-to-Use Primary Antibodies listed in this section are packaged in Dako Autostainer Reagent Vials for convenience, ease of operation, and time savings.
IS-Series Antibodies can only be used with EnVision FLEX and EnVision FLEX+ Visualization Systems.

The package insert included with each Dako antibody gives a detailed product description.

Monoclonal Mouse Anti-Human
**Actin (Muscle)**
IVD IS700 Clone HHF35 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Actin (Smooth Muscle)**
IVD IS611 Clone 1A4 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**Alpha-1-Fetoprotein**
IVD IS500 30 tests, 6 mL

Monoclonal Rabbit Anti-Human
**AMACR**
IVD IS060 Clone 13H4 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**B-Cell-Specific Activator Protein**
IVD IS650 Clone DAK-Pax5 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**BCL2 Oncoprotein**
IVD IS614 Clone 124 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**BCL6 Protein**
IVD IS625 Clone PG-B6p 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Beta-Catenin**
IVD IS702 Clone β-Catenin-1 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CA 125**
IVD IS701 Clone M11 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**Calcitonin**
IVD IS515 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Caldesmon**
IVD IS054 Clone h-CD 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Calretinin**
IVD IS627 Clone DAK-Calret 1 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Carcinoembryonic Antigen (CEA)**
IVD IS622 Clone II-7 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**Carcinoembryonic Antigen (CEA)**
IVD IS526 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD1a**
IVD IS069 Clone 010 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD2**
IVD IS651 Clone AB75 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**CD3**
IVD IS503 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD4**
IVD IS649 Clone 4B12 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD5**
IVD IS082 Clone 4C7 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD7**
IVD IS643 Clone CBC.37 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD8**
IVD IS623 Clone C8/144B 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD10**
IVD IS648 Clone 56C6 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD15**
IVD IS062 Clone Carb-3 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD19**
IVD IS656 Clone LE-CD19 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD20cy**
IVD IS604 Clone L26 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD21**
IVD IS608 Clone 1F8 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD23**
IVD IS781 Clone DAK-CD23 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD30**
IVD IS602 Clone Ber-H2 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD31, Endothelial Cell**
IVD IS610 Clone JC70A 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD34 Class II**
IVD IS632 Clone QBEnd 10 30 tests, 6 mL

# Primary Antibodies (FLEX Ready-to-Use) (Dako Autostainer) (continued)

Monoclonal Mouse Anti-Human
**CD43**
IVD IS636 Clone DF-T1 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD45, Leucocyte Common Antigen**
IVD IS751 Clones 2B11 + PD7/26 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD56**
IVD IS628 Clone 123C3 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD57**
IVD IS647 Clone TB01 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD68**
IVD IS609 Clone KP1 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD68**
IVD IS613 Clone PG-M1 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD79α**
IVD IS621 Clone JCB117 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD99, MIC2 Gene Products, Ewing's Sarcoma Marker**
IVD IS057 Clone 12E7 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD138**
IVD IS642 Clone MI15 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CD246, ALK Protein**
IVD IS641 Clone ALK1 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**CDX2**
IVD IS080 Clone DAK-CDX2 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**Chorionic Gonadotropin (hCG)**
IVD IS508 30 tests, 6 mL

Monoclonal Rabbit Anti-Human
**Cyclin D1**
IVD IS083 Clone EP12 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Cytokeratin**
IVD IS053 Clone AE1/AE3 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Cytokeratin 5/6**
IVD IS780 Clone D5/16 B4 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Cytokeratin 7**
IVD IS619 Clone OV-TL 12/30 30 tests, 6 mL

Monoclonal Mouse Anti-
**Cytokeratin 17**
IVD IS620 Clone E3 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Cytokeratin 18**
IVD IS618 Clone DC 10 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Cytokeratin 19**
IVD IS615 Clone RCK108 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Cytokeratin 20**
IVD IS777 Clone $K_s$20.8 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Cytokeratin, High Molecular Weight**
IVD IS051 Clone 34ßE12 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Desmin**
IVD IS606 Clone D33 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**E-Cadherin**
IVD IS059 Clone NCH-38 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Epithelial Antigen**
IVD IS637 Clone Ber-EP4 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Epithelial Membrane Antigen (EMA)**
IVD IS629 Clone E29 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**Gastrin**
IVD IS519 30 tests, 6 mL

Polyclonal Rabbit Anti-
**Glial Fibrillary Acidic Protein**
IVD IS524 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Gross Cystic Disease Fluid Protein-15**
IVD IS077 Clone 23A3 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Hepatocyte**
IVD IS624 Clone OCH1E5 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**IgA**
IVD IS510 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**IgD**
IVD IS517 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**IgG**
IVD IS512 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**IgM**
IVD IS513 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Inhibin α**
IVD IS058 Clone R1 30 tests, 6 mL

# Primary Antibodies (FLEX Ready-to-Use) (Dako Autostainer) (continued)

Polyclonal Guinea Pig Anti-
**Insulin**
IVD IS002 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**Kappa Light Chains**
IVD IS506 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Ki-67 Antigen**
IVD IS626 Clone MIB-1 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**Lambda Light Chains**
IVD IS507 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Mammaglobin**
IVD IS074 Clone 304-1A5 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Mast Cell Tryptase**
IVD IS640 Clone AA1 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Melan-A**
IVD IS633 Clone A103 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Melanosome**
IVD IS052 Clone HMB-45 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**MUM1 Protein**
IVD IS644 Clone MUM1p 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**MutL Protein Homolog 1**
IVD IS079 Clone ES05 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**Myeloperoxidase**
IVD IS511 30 tests, 6 mL

Monoclonal Mouse Anti-
**Myogenin**
IVD IS067 Clone F5D 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Neurofilament Protein**
IVD IS607 Clone 2F11 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Neuron-Specific Enolase (NSE)**
IVD IS612 Clone BBS/NC/VI-H14 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**p53 Protein**
IVD IS616 Clone DO-7 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Placental Alkaline Phosphatase**
IVD IS779 Clone 8A9 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Podoplanin**
IVD IS072 Clone D2-40 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**Prostate-Specific Antigen (PSA)**
IVD IS514 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Renal Cell Carcinoma Marker**
IVD IS075 Clone SPM314 30 tests, 6 mL

Polyclonal Rabbit Anti-
**S100**
IVD IS504 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Smooth Muscle Myosin Heavy Chain**
IVD IS066 Clone SMMS-1 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**Thyroglobulin**
IVD IS509 30 tests, 6 mL

Monoclonal Mouse Anti-
**Thyroid Transcription Factor (TTF-1)**
IVD IS056 Clone 8G7G3/1 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Tyrosinase**
IVD IS061 Clone T311 30 tests, 6 mL

Monoclonal Mouse Anti-
**Villin**
IVD IS076 Clone 1D2 C3 30 tests, 6 mL

Monoclonal Mouse Anti-
**Vimentin**
IVD IS630 Clone V9 30 tests, 6 mL

Polyclonal Rabbit Anti-Human
**Von Willebrand Factor**
IVD IS527 30 tests, 6 mL

Monoclonal Mouse Anti-Human
**Wilms' Tumor 1 (WT1) Protein**
IVD IS055 Clone 6F-H2 30 tests, 6 mL

# Negative Controls (FLEX Ready-to-Use) (Dako Autostainer)

**Negative Control for IS-Series Mouse Primary Antibodies**

IVD IS750 Ready-to-use 60 tests, 12 mL

Universal negative control for all FLEX ready-to-use **mouse** primary antibodies for use on Dako Autostainer/Autostainer Plus instruments. Packaged in Dako Autostainer Vial.

**Negative Control for IS-Series Rabbit Primary Antibodies**

IVD IS600 Ready-to-use 60 tests, 12 mL

Universal negative control for all FLEX ready-to-use **rabbit** primary antibodies for use on Dako Autostainer/Autostainer Plus instruments. Packaged in Autostainer Reagent Vial.

# Visualization Systems (EnVision FLEX) (Dako Autostainer)

**EnVision FLEX, High pH (Dako Autostainer/Autostainer Plus)**

IVD K8010 HRP. Rabbit/Mouse. High pH 400-600 tests

EnVision FLEX, High pH is a high-sensitivity visualization system intended for use in immunohistochemistry together with Dako Autostainer Instruments. The dual link system detects primary mouse and rabbit antibodies and the reaction is visualized by DAB+ Chromogen. The convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer, Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9), and Wash Buffer (20x). EnVision FLEX convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Dako Autostainer Instruments.

**EnVision FLEX Mini Kit, High pH (Dako Autostainer/Autostainer Plus)**

IVD K8024 HRP. Rabbit/Mouse. High pH 125-190 tests

EnVision FLEX Mini Kit, High pH is a high-sensitivity visualization system intended for use in immunohistochemistry together with Dako Autostainer Instruments. The dual link system detects primary mouse and rabbit antibodies and the reaction is visualized by DAB+ Chromogen. The convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer, Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9), and Wash Buffer (20x). EnVision FLEX convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Dako Autostainer Instruments.

**EnVision FLEX+, Mouse, High pH (Dako Autostainer/Autostainer Plus)**

IVD K8012 HRP. Mouse. High pH 400-600 tests

EnVision FLEX+, Mouse, High pH is a very-high-sensitivity visualization system intended for use in immunohistochemistry together with Dako Autostainer Instruments. The EnVision FLEX+ Mouse (LINKER) amplifies the signal of primary mouse antibodies and the reaction is visualized by DAB+ Chromogen. In addition to the EnVision FLEX+ Mouse (LINKER) the convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer, Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9), and Wash Buffer (20x). The EnVision FLEX+ Rabbit (LINKER), Code K8019, is an optional EnVision FLEX reagent that may be used with EnVision FLEX and FLEX+ convenience kits to amplify the signal of primary rabbit antibodies. EnVision FLEX+ convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Dako Autostainer Instruments.

# Optional Reagents (EnVision FLEX) (Dako Autostainer)

### Antibody Diluent

IVD K8006 Diluent 400-600 tests, 120 mL,

EnVision FLEX Antibody Diluent is an optional EnVision FLEX reagent and is recommended for the dilution of Dako concentrated Primary Antibodies. EnVision FLEX Antibody Diluent is compatible with all EnVision FLEX and FLEX+ convenience kits.

### Hematoxylin (Dako Autostainer/Autostainer Plus)

IVD K8018 Ready-to-use 400-600 tests, 10 x 13 mL

EnVision FLEX Hematoxylin is an optional EnVision FLEX reagent and is recommended for counterstaining. The reagent provides a clear blue, nuclear staining. EnVision FLEX Hematoxylin is compatible with EnVision FLEX and FLEX+ convenience kits.

### Mouse (LINKER) (Dako Autostainer/Autostainer Plus)

IVD K8022 Ready-to-use 120-190 tests, 3 x 13 mL

EnVision FLEX+ Mouse (LINKER) is an optional EnVision FLEX+ reagent and may be used with EnVision FLEX and FLEX+ convenience kits to amplify the signal of primary mouse antibodies.

### Rabbit (LINKER) (Dako Autostainer/Autostainer Plus)

IVD K8019 Ready-to-use 120-190 tests, 3 x 13 mL

EnVision FLEX+ Rabbit (LINKER) is an optional EnVision FLEX+ reagent and may be used with EnVision FLEX and FLEX+ convenience kits to amplify the signal of primary rabbit antibodies.

### Target Retrieval Solution, High pH

IVD K8004 Concentrate 3 x 30 mL, 50x concentrated

EnVision FLEX Target Retrieval Solution, High pH is an optional EnVision FLEX reagent containing 50x concentrated Tris/EDTA, pH 9 and is compatible with all EnVision FLEX and FLEX+ convenience kits for both Autostainer Link Instruments and Dako Autostainer Instruments. One 30 mL bottle, when properly diluted, is enough to fill one PT Link tank.

### Target Retrieval Solution, Low pH

IVD K8005 Concentrate 3 x 30 mL, 50x concentrated

EnVision FLEX Target Retrieval Solution, Low pH is an optional EnVision FLEX reagent containing 50x concentrated citrate buffer, pH 6.1 and is compatible with all EnVision FLEX and FLEX+ convenience kits for both Autostainer Link Instruments and Dako Autostainer Instruments. One 30 mL bottle, when properly diluted, is enough to fill one PT Link tank.

### Wash Buffer

IVD K8007 Concentrate 1 L, 20x concentrated

EnVision FLEX Wash Buffer is an optional EnVision FLEX reagent containing 20x concentrated wash buffer and is compatible with all EnVision FLEX and FLEX+ convenience kits for both Autostainer Link Instruments and Dako Autostainer Instruments.

# Visualization Systems (Dako Autostainer)

### ADVANCE

| | | | |
|---|---|---|---|
| IVD | K4069 | HRP. Rabbit/Mouse | 55 tests |
| IVD | K4068 | HRP. Rabbit/Mouse | 550 tests |

This ready-to-use, peroxidase-based ADVANCE kit is compatible with suitably diluted rabbit and mouse primary antibodies. The ADVANCE kit is a super-sensitive, non-biotin based, immunohistochemical visualization system that is useful for the detection of antigens in low concentrations, for short incubation time or for higher dilution of primary antibodies. ADVANCE is 5 or more times more sensitive than EnVision+ and with approximately the same sensitivity as CSA II.
Note: The number of tests for this kit is based on the use of 200 µL of reagent per slide.

### EnVision+ Dual Link Kit

| | | | |
|---|---|---|---|
| IVD | K4065 | HRP. Rabbit/Mouse (DAB+) | 150 tests |

This ready-to-use, peroxidase-based EnVision+ Dual Link Kit is compatible with suitably diluted rabbit and mouse primary antibodies. In addition to the ready-to-use EnVision+ Dual Link reagent, the kit includes a blocking reagent for endogenous peroxidase and a high-sensitivity diaminobenzidine (DAB+) chromogenic substrate system.

### EnVision+ Dual Link, Single Reagent

| | | | |
|---|---|---|---|
| IVD | K4061 | HRP. Rabbit/Mouse | 10 x 11 mL |

This ready-to-use, peroxidase-conjugated EnVision+ Dual Link reagent is for use when a detection system more sensitive than the LSAB2 kit is needed. It is compatible with suitably diluted rabbit and mouse primary antibodies. The reagent is provided in Dako Autostainer Reagent Vials.

### EnVision G|2 Doublestain System, Rabbit/Mouse (DAB+/Permanent Red)

| | | | |
|---|---|---|---|
| IVD | K5361 | | 150 tests |

EnVision G|2 Doublestain System is a high-sensitivity peroxidase and alkaline-phosphatase-based 2nd generation visualization kit. The kit is intended for use in immunohistochemistry for the simultaneous detection of two different antigens within the same specimen, and is compatible with suitably diluted rabbit and mouse primary antibodies. The kit may be used on formalin-fixed, paraffin-embedded tissue sections and fixed cell smears. In addition to the ready-to-use EnVision G|2 reagents packaged in Dako Autostainer Reagent Vials, the kit includes both DAB+ and Permanent Red chromogenic substrate systems.
Note: The number of tests for this kit is based on the use of 200 µL of reagent per slide.

### EnVision G|2 System/AP, Rabbit/Mouse (Permanent Red)

| | | | |
|---|---|---|---|
| IVD | K5355 | | 50 tests/500 tests |

EnVision G|2 System/AP is a high-sensitivity alkaline-phosphatase-based 2nd generation visualization kit. The kit is intended for use in immunohistochemistry, and it is compatible with suitably diluted rabbit and mouse primary antibodies. The kit may be used on formalin-fixed, paraffin-embedded tissue sections, frozen sections and fixed cell smears. In addition to the ready-to-use EnVision G|2 reagents packaged in Dako Autostainer Reagent Vials, the kit includes a Permanent Red chromogenic substrate system. The kit may be used in manual procedures or with the Dako Autostainer instruments.
Note: The number of tests for this kit is based on the use of 200 µL of reagent per slide.

### EnVision+ Kits

| | | | |
|---|---|---|---|
| IVD | K4005 | HRP. Mouse (AEC+) | 1100 tests |
| IVD | K4007 | HRP. Mouse (DAB+) | 1100 tests |
| IVD | K4009 | HRP. Rabbit (AEC+) | 1100 tests |
| IVD | K4011 | HRP. Rabbit (DAB+) | 1100 tests |

These ready-to-use, peroxidase-based EnVision+ kits are compatible with suitably diluted mouse or rabbit primary antibodies, respectively. In addition to the ready-to-use EnVision+ reagent, the kits include a blocking reagent for endogenous peroxidase, and a high-sensitivity 3-amino-9-ethylcarbazole (AEC+) chromogenic substrate system.

### Universal LSAB2 Kit/HRP, Rabbit/Mouse

| | | | |
|---|---|---|---|
| IVD | K0675 | | 10 x 11 mL Link + 10 x 11 mL Streptavidin/HRP |

This peroxidase-based visualization kit is for use with both rabbit and mouse primary antibodies. The biotinylated link antibody in the kit is produced in goat. Reagents are ready-to-use and are provided in Dako Autostainer Reagent Vials.

### Primary Antibodies

Primary monoclonal and polyclonal antibodies, primary antibody conjugates, and prediluted ready-to-use antibody systems are presented here. These products are intended for use on tissue sections and/or cell smears.

Products originating from the same primary antibody have been grouped together. For each group, suitable tissue fixation and pre-treatment of sections are indicated.

All Dako antibody reagents for immunohistochemistry are in liquid form and contain an antimicrobial agent. A detailed product description, a guideline for dilution, and a recommended staining procedure are given in the package insert included with each vial.

### Antibody Forms

Dako primary antibodies for immunohistochemistry are provided undiluted as well as in ready-to-use forms adapted for different staining procedures and detection kits as described below.

### Concentrated antibody reagents

The polyclonal antibody reagents are provided as whole serum, Ig fractions, $F(ab')_2$ fragments or affinity-isolated while the monoclonal antibodies are provided as tissue culture supernatants or purified from culture supernatants. In a few cases, monoclonal antibodies have been purified from ascitic fluid.

### Ready-to-use, for EnVision FLEX

(GA, IR and IS-Series)
GA-series is designed for Dako Omnis, IR-series is designed for Automated Link Platforms, and the IS-series is designed for Dako Autostainer and Autostainer Plus. For optimal performance these prediluted primary antibodies can only be used with EnVisionFLEX and EnVisionFLEX+ visualization systems. FLEX Ready-to-Use Universal Negative Controls are available separately for monoclonal mouse (Code GA750, IR750 and IS750) and polyclonal rabbit (Code GA600, IR600 and IS600) primary antibodies.

### Ready-to-Use, for EnVision DuoFLEX

(IC-Series)
These ready-to-use antibody cocktails are designed for optimal performance using EnVision DuoFLEX Doublestain System, and will provide a two-color staining reaction on the same tissue section. The IC-series is designed for Automated Link Platforms.

### Antibody Applications

Antigens may resist fixation to a variable degree. Therefore, suitable tissue fixation and, when necessary, antigen retrieval method are listed for each antibody and explained below.

- **Frozen:** The appropriately diluted and concentrated antibody is useful for labelling sections of frozen tissue fixed in acetone for 10 minutes. It also works well on cell smears fixed in a 19:19:1 mixture of acetone:methanol:36% fomalin for 90 seconds, or in acetone for 10 minutes.
- **Formalin:** The antibody is suitable for labelling formalin-fixed, paraffin-embedded (FFPE) tissue sections. The duration of the formalin fixation should, generally, not exceed 24-48 hours.
- **Enzyme:** Optimal staining results require adequate treatment of deparaffinized, formalin-fixed tissue sections with a proteolytic enzyme before incubation with the antibody. Detailed procedures for the use of Dako proteolytic enzymes are included with the products.
- **HIER:** Optimal staining results require heat-induced epitope retrieval (HIER) of deparaffinized, formalin-fixed tissue sections, for example in a microwave oven, a pressure cooker or a water bath, before incubation with the antibody. During heat treatment the sections must be immersed in a suitable buffer. A detailed procedure is available from Dako.
- **Enzyme/HIER:** Optimal staining results on deparaffinized, formalin-fixed tissue sections require *either* treatment with a proteolytic enzyme *or* heating in a suitable buffer before incubation with the antibody.
- **Enzyme + HIER:** Optimal staining results on deparaffinized, formalin-fixed tissue sections require treatment with a proteolytic enzyme as well as heating in a suitable buffer before incubation with the antibody.

### Stains

All immunohistochemical stains are from formalin-fixed, paraffin-embedded (FFPE) tissue sections unless otherwise specified. For more images and high-resolution zoom tool, please visit our Products section on www.dako.com.

### Autostainer Link 48 Installers

DakoLink users can download Installers, which will update specific DakoLink database protocols.

Go to the www.dako.com/installer and locate the antibody code number/protocol in question, click the link to download the Installer to a portable device, e.g. a USB flash drive, and transfer the file to the DakoLink Server computer. Read the full installation guide before beginning the update process.

### Adjunctive Diagnostic Information

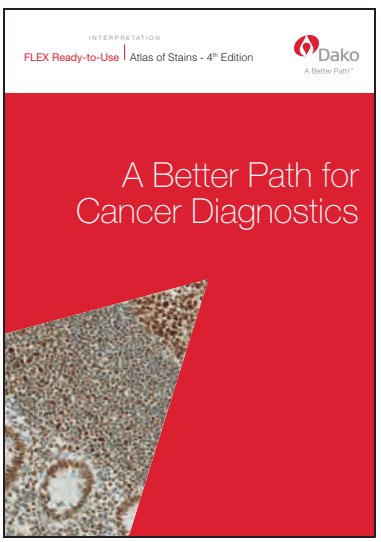
IHC class I devices provide pathologists with adjunctive diagnostic information that may be incorporated into the pathologist's report, but that is not ordinarily reported to the clinician as an independent finding. Results aid in the classification of neoplasms. Differential classification is aided by the results from a panel of antibodies. The clinical interpretation of any staining or its absence should be complemented by morphological studies using proper controls and should be evaluated within the context of the patient's clinical history and other diagnostic tests by a qualified pathologist. Primary antibodies are intended to be used after the primary diagnosis of tumor has been made by conventional histopathology using non-immunologic histochemical stains, such as hematoxylin and eosin.

# Overview of FLEX Ready-to-Use Antibodies

FLEX Ready-to-Use (RTU) antibodies are pre-diluted primary antibodies specifically developed for automated use while maintaining the high-quality staining performance that Dako's antibodies are known for. Each FLEX RTU antibody has been developed with focus on delivering a consistent, high-quality staining performance with just one flexible staining protocol. The staining performance of all antibodies has been defined, tested and approved through collaboration with leading international pathologists.

For each FLEX RTU antibody, one protocol is recommended to obtain optimal staining results. The quality of the stainings has been reviewed by a group of expert pathologists. In our Atlas of Stains guide book, we present staining images of high and low-expression structures as well as of recommended control tissues.

In the following, the FLEX RTU antibodies are presented in tables according to organ or tissue type. This is done to ease and enhance the selection of antibodies for relevant markers to examine the expression pattern in the different tissue or organ types.




**FLEX RTU Antibodies**

- Deliver a high-quality staining performance reviewed and accepted by leading pathologists
- Provide a basis for consistency
- Improve overall laboratory efficiency
- Increase productivity

**Content**

1. Breast Tissue
2. Endocrine System
3. Gastrointestinal Tract
4. Kidney and Urinary Tract
5. Liver, Biliary System and Exocrine Pancreas
6. Lymphatic Tissue and Bone Marrow
7. Mesothelial Surfaces
8. Nervous System
9. Prostate
10. Reproductive System
11. Respiratory System
12. Skeletal Muscles
13. Skin
14. Soft Tissue and Bones
15. Undifferentiated Tumors

For product descriptions, staining images, package inserts and contact information for local Dako representatives, please visit: www.dako.com.

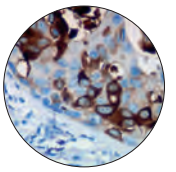
**Terms and Conditions for Use of Target-Specific FLEX Ready-to-Use Tables**

The Target-Specific FLEX Ready-to-Use tables are by no means intended as a replacement of the professional judgment of a certified pathologist. The contents of the tables should not be regarded as indicative of a standard procedure for diagnosis or treatment. The products mentioned in the Target-Specific FLEX Ready-to-Use tables should be used by qualified personnel only. The user of such products should refer to the Package Inserts accompanying the selected Dako product. Dako and its partners cannot be held responsible for the use of products in any other way than described in the Package Inserts, or for conclusions drawn based on results obtained with our products.

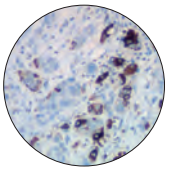
Dako does not claim or make warranties that the information provided in the Target-Specific FLEX Ready-to-Use tables are valid everywhere, since there are differences in the acceptance of the relevance of various markers between countries and pathologists and in the standard operating procedures used.

## FLEX RTU Antibodies | Breast Tissue

| Page | Anti- | Clone |
|---|---|---|
| 74 | BCL2 Oncoprotein | 124 |
| 76 | Caldesmon | h-CD |
| 81 | CD31, Endothelial Cell | JC70A |
| 82 | CD34 Class II | QBEnd 10 |
| 88 | Cytokeratin 8/18 | EP17/EP30 |
| 90 | E-Cadherin | NCH-38 |
| 92 | Epithelial Membrane Antigen | E29 |
| 93 | Estrogen Receptor α | EP1 |
| 95 | Gross Cystic Disease Fluid Protein-15 | 23A3 |
| 98 | Ki-67 Antigen | MIB-1 |
| 100 | Mammaglobin | 304-1A5 |
| 73 | Muscle Actin | HHF35 |
| 104 | Myosin Heavy Chain, Smooth Muscle | SMMS-1 |
| 106 | p53 Protein | DO-7 |
| 108 | Progesterone Receptor | PgR 636 |
| 110 | S100 | Polyclonal |
| 73 | Smooth Muscle Actin | 1A4 |



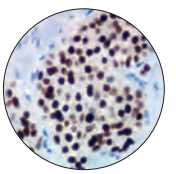
*Breast ductal carcinoma stained with Anti-Gross Cystic Disease Fluid Protein-15, Code IR077/IS077.*



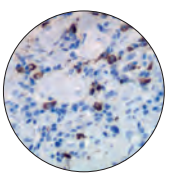
*Breast ductal carcinoma stained with Anti-Mammaglobin, Code IR074/IS074.*

## FLEX RTU Antibodies | Endocrine System

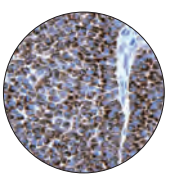
| Page | Anti- | Clone |
|---|---|---|
| | General neuroendocrine markers | |
| 83 | CD56 | 123C3 |
| 104 | Neuron-Specific Enolase | BBS/NC/VI-H14 |
| 110 | S100 | Polyclonal |
| 110 | Synaptophysin | DAK-SYNAP |
| | Alimentary tract and pancreas | |
| 86 | CDX2 | DAK-CDX2 |
| 94 | Gastrin | Polyclonal |
| 97 | Insulin | Polyclonal |
| | Gonades | |
| 86 | Chorionic Gonadotropin | Polyclonal |
| 97 | Inhibin α | R1 |
| 100 | Melan-A | A103 |
| | Pituitary glands | |
| 86 | Chorionic Gonadotropin | Polyclonal |
| | Thyroid and parathyroid glands | |
| 76 | Calcitonin | Polyclonal |
| 111 | Thyroglobulin | Polyclonal |
| 112 | Thyroid Transcription Factor, TTF-1 | 8G7G3/1 |



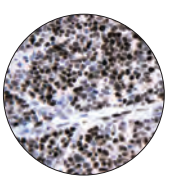
*Gastrointestinal carcinoma stained with Anti-CDX2, Code IR080/IS080.*



*Insulinoma stained with Anti-Insulin, Code IR002/IS002.*



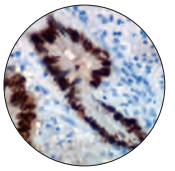
*Granulosa cell tumor stained with Anti-Melan A, Code IR633/IS633.*



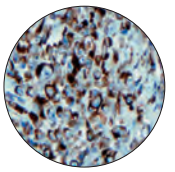
*Lung small cell carcinoma stained with Anti-Thyroid Transcription Factor, Code IR056/IS056.*

## FLEX RTU Antibodies | Gastrointestinal Tract

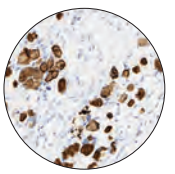
| Page | Anti- | Clone |
|---|---|---|
| 75 | Beta-Catenin | β-Catenin-1 |
| 77 | Calretinin | DAK-Calret 1 |
| 82 | CD45, Leucocyte Common Antigen | 2B11 + PD7/26 |
| 86 | CDX2 | DAK-CDX2 |
| 90 | Desmin | D33 |
| 90 | E-Cadherin | NCH-38 |
| 101 | MUC2 | CCP58 |
| 102 | MUC5AC | CLH2 |
| 102 | MutL Protein Homolog 1 | ES05 |
| 102 | MutS Protein Homolog 2 | FE11 |
| 103 | MutS Protein Homolog 6 | EP49 |
| 104 | Neurofilament Protein | 2F11 |
| 104 | Neuron-Specific Enolase | BBS/NC/VI-H14 |
| 106 | p53 Protein | DO-7 |
| 107 | Podoplanin | D2-40 |
| 107 | Postmeiotic Segregation Increased 2 | EP51 |
| 110 | S100 | Polyclonal |
| 73 | Smooth Muscle Actin | 1A4 |
| 113 | Villin | 1D2 C3 |
| 113 | Vimentin | V9 |



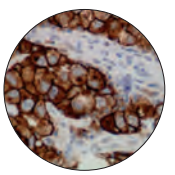
*Colon adenocarcinoma stained with Anti-CDX2, Code IR080/IS080.*



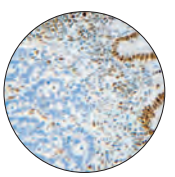
*Rhabdomyosarcoma stained with Anti-Desmin, Code IR606/IS606.*



*Colon adenocarcinoma (FFPE) metastatic to the ovary stained with FLEX Anti-MUC2, Code IR658.*



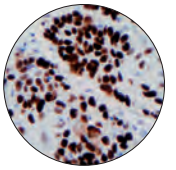
*Epitheloid mesothelioma stained with Anti-Podoplanin, Code IR072/IS072.*



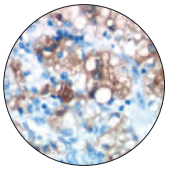
*Colon adenocarcinoma (FFPE) with loss of PMS2 protein stained with FLEX Anti-PMS2, Code IR087.*

## FLEX RTU Antibodies | Kidney and Urinary Tract

| Page | Anti- | Clone |
|---|---|---|
| 79 | CD10 | 56C6 |
| 92 | Epithelial Membrane Antigen | E29 |
| 98 | Ki-67 Antigen | MIB-1 |
| 100 | Melan-A | A103 |
| 106 | p53 Protein | DO-7 |
| 109 | Renal Cell Carcinoma Marker | SPM314 |
| 110 | S100 | Polyclonal |
| 116 | S100 + Tyrosinase + Melan-A | Polyclonal + T311 + A103 |
| 73 | Smooth Muscle Actin | 1A4 |
| 113 | Vimentin | V9 |



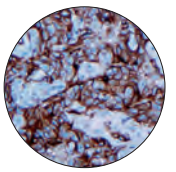
*Transitional carcinoma of the bladder stained with Anti-p53 Protein, Code IR616/IS616.*



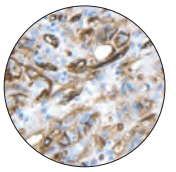
*Renal cell carcinoma stained with Anti-Renal Cell Carcinoma Marker, Code IR075/IS075.*

## FLEX RTU Antibodies | Liver, Biliary System and Exocrine Pancreas

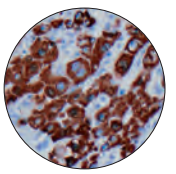
| Page | Anti- | Clone |
|---|---|---|
| 73 | Alpha-1-Fetoprotein | Polyclonal |
| 76 | CA 125 | M11 |
| 79 | CD10 | 56C6 |
| 81 | CD31, Endothelial Cell | JC/70A |
| 82 | CD34 Class II | QBEnd 10 |
| 86 | CDX2 | DAK-CDX2 |
| 92 | Epithelial Membrane Antigen | E29 |
| 95 | Hepatocyte | OCH1E5 |
| 98 | Ki-67 Antigen | MIB-1 |
| 106 | p53 Protein | DO-7 |
| 108 | Progesterone Receptor | PgR 636 |
| 73 | Smooth Muscle Actin | 1A4 |



*Hemangiosarcoma stained with Anti-CD31, Endothelial Cell, Code IR610/IS610.*



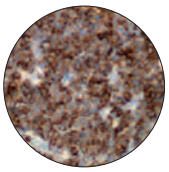
*Angiosarcoma stained with Anti-CD34, Class II, Code IR632/IS632.*



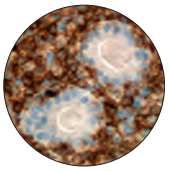
*Hepatocellular carcinoma stained with Anti-Hepatocyte, Code IR624/IS624.*

## FLEX RTU Antibodies | Lymphatic Tissue and Bone Marrow

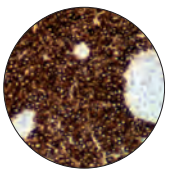
| Page | Anti- | Clone |
|---|---|---|
| 74 | B-Cell-Specific Activator Protein | DAK-Pax-5 |
| 74 | BCL2 Oncoprotein | 124 |
| 75 | BCL6 Protein | PG-B6p |
| 77 | CD1a | 010 |
| 78 | CD2 | AB75 |
| 78 | CD3 | Polyclonal |
| 115 | CD3 + CD20cy | Polyclonal + L26 |
| 78 | CD4 | 4B12 |
| 78 | CD5 | 4C7 |
| 79 | CD7 | CBC.37 |
| 79 | CD8 | C8/144B |
| 79 | CD10 | 56C6 |
| 80 | CD15 | Carb-3 |
| 80 | CD19 | LE-CD19 |
| 80 | CD20cy | L26 |
| 80 | CD21 | 1F8 |
| 81 | CD23 | DAK-CD23 |
| 81 | CD30 | Ber-H2 |
| 81 | CD31, Endothelial Cell | JC70A |
| 82 | CD34 Class II | QBEnd 10 |
| 82 | CD43 | DF-T1 |
| 82 | CD45, Leucocyte Common Antigen | 2B11 + PD7/26 |
| 83 | CD56 | 123C3 |
| 83 | CD57 | TB01 |
| 84 | CD68 | KP1 |
| 84 | CD68 | PG-M1 |
| 84 | CD79α | JCB117 |
| 85 | CD138 | MI15 |
| 86 | CD246, ALK Protein | ALK1 |
| 87 | Cyclin D1 | EP12 |
| 92 | Epithelial Membrane Antigen | E29 |
| 96 | IgA | Polyclonal |
| 96 | IgD | Polyclonal |
| 96 | IgG | Polyclonal |
| 97 | IgM | Polyclonal |
| 98 | Kappa Light Chains | Polyclonal |
| 98 | Ki-67 Antigen | MIB-1 |
| 98 | Lambda Light Chains | Polyclonal |
| 102 | MUM1 Protein | MUM1p |
| 103 | Myeloperoxidase | Polyclonal |
| 105 | Nucleophosmin | 376 |
| 110 | S100 | Polyclonal |
| 111 | Terminal Deoxynucleotidyl Transferase | EP266 |
| 114 | Von Willebrand Factor | Polyclonal |
| 114 | ZAP-70 | 2F3.2 |



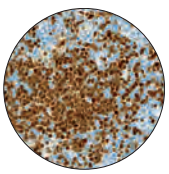
*Precursor T-cell lymphoblastic lymphoma/leukemia stained with Anti-CD2, Code IR651/IS651.*



*Anaplastic large cell lymphoma stained with Anti-CD4, Code IR649/IS649.*



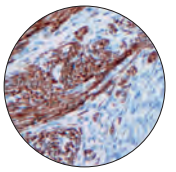
*Precursor B-cell lymphoblastic lymphoma/leukemia stained with Anti-CD10, Code IR648/IS648.*



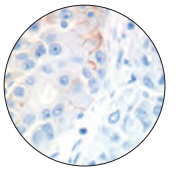
*Mantle cell lymphoma stained with Anti-Cyclin D1, Code IR083/IS083.*

## FLEX RTU Antibodies | Mesothelial Surfaces

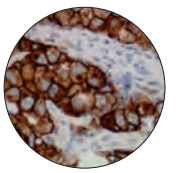
| Page | Anti- | Clone |
|---|---|---|
| 76 | CA 125 | M11 |
| 77 | Calretinin | DAK-Calret 1 |
| 77 | Carcinoembryonic Antigen | II-7 |
| 77 | Carcinoembryonic Antigen | Polyclonal |
| 90 | Desmin | D33 |
| 91 | Epithelial Antigen | Ber-EP4 |
| 92 | Epithelial Membrane Antigen | E29 |
| 107 | Podoplanin | D2-40 |
| 73 | Smooth Muscle Actin | 1A4 |
| 113 | Vimentin | V9 |
| 114 | Wilms' Tumor 1 Protein | 6F-H2 |



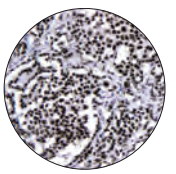
*Uterine leiomyoma stained with Anti-Desmin, Code IR606/IS606.*



*Mesothelioma stained with Anti-Epithelial Antigen, Code IR637/IS637.*



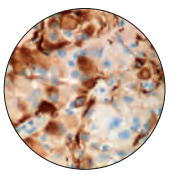
*Mesothelioma stained with Anti-Podoplanin, Code IR072/IS072.*



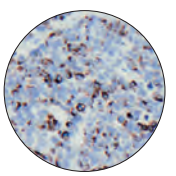
*Mesothelioma stained with Anti-Wilms' Tumor 1 Protein, Code IR055/IS055.*

## FLEX RTU Antibodies | Nervous System

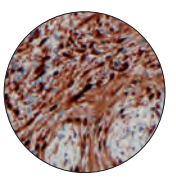
| Page | Anti- | Clone |
|---|---|---|
| 82 | CD45, Leucocyte Common Antigen | 2B11 + PD7/26 |
| 87 | Cytokeratin | AE1/AE3 |
| 92 | Epithelial Membrane Antigen | E29 |
| 94 | Glial Fibrillary Acidic Protein | 6F2 |
| 104 | Neurofilament Protein | 2F11 |
| 110 | S100 | Polyclonal |
| 110 | Synaptophysin | DAK-SYNAP |



*Astrocytoma stained with Anti-Glial Fibrillary Acidic Protein, Code IR524/IS524.*



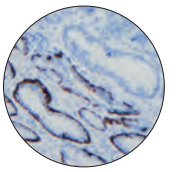
*Merkel cell carcinoma stained with Anti-Neurofilament Protein, Code IR607/IS607.*



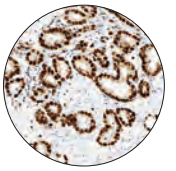
*Schwannoma stained with Anti-S100, Code IR504/IS504.*

## FLEX RTU Antibodies | Prostate

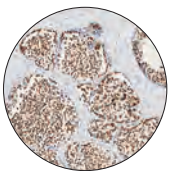
| Page | Anti- | Clone |
|---|---|---|
| 74 | AMACR | 13H4 |
| 115 | AMACR + Cytokeratin HMW + Cytokeratin 5/6 | 13H4 + 34βE12 + D5/16 B4 |
| 87 | Cytokeratin 5/6 | D5/16 B4 |
| 92 | ERG | EP111 |
| 98 | Ki-67 Antigen | MIB-1 |
| 106 | p53 Protein | DO-7 |
| 108 | Prostate-Specific Antigen | Polyclonal |
| 109 | Prostate-Specific Membrane Antigen | 3E6 |
| 109 | Prostein | 10E3 |



*Prostate hyperplasia and prostate carcinoma stained with Anti-Cytokeratin 5/6, Code IR780/IS780.*



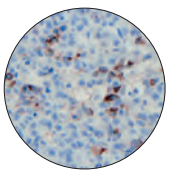
*Prostate adenocarcinoma (FFPE) stained with FLEX Anti-ERG, Code IR659.*



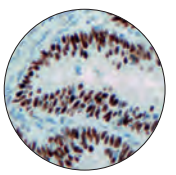
*Prostate adenocarcinoma (FPPE) stained with FLEX Anti-Prostein, Code IR088.*

## FLEX RTU Antibodies | Reproductive System

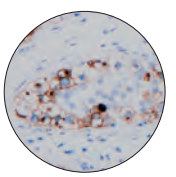
| Page | Anti- | Clone |
|---|---|---|
| 73 | Alpha-1-Fetoprotein | Polyclonal |
| 76 | CA 125 | M11 |
| 77 | Calretinin | DAK-Calret 1 |
| 77 | Carcinoembryonic Antigen | II-7 |
| 77 | Carcinoembryonic Antigen | Polyclonal |
| 86 | CDX2 | DAK-CDX2 |
| 92 | Epithelial Membrane Antigen | E29 |
| 92 | ERCC1 | 4F9 |
| 97 | Inhibin α | R1 |
| 98 | Ki-67 Antigen | MIB-1 |
| 100 | Melan-A | A103 |
| 101 | Melanosome | HMB-45 |
| 105 | Octamer-Binding Transcription Factor 3/4 | N1NK |
| 106 | p53 Protein | DO-7 |
| 107 | Placental Alkaline Phosphatase | 8A9 |
| 108 | Progesterone Receptor | PgR 636 |
| 110 | S100 | Polyclonal |
| 73 | Smooth Muscle Actin | 1A4 |
| 110 | Synaptophysin | DAK-SYNAP |
| 110 | Vimentin | V9 |
| 114 | Wilms' Tumor 1 Protein | 6F-H2 |



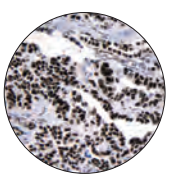
*Yolk sac tumor stained with Anti-Alpha-1-Fetoprotein, Code IR500/IS500.*



*Serous ovarian carcinoma stained with Anti-p53 Protein, Code IR616/IS616.*



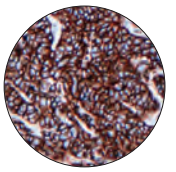
*Intratubular germ cell tumor stained with Anti-Placental Alkaline Phosphatase, Code IR779/IS779.*



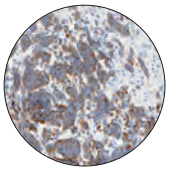
*Serous ovarian adenocarcinoma stained with Anti-Wilms' Tumor 1 Protein, Code IR055/IS055.*

## FLEX RTU Antibodies | Respiratory System

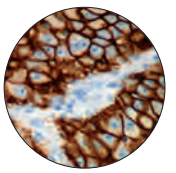
| Page | Anti- | Clone |
|---|---|---|
| 77 | Calretinin | DAK-Calret 1 |
| 77 | Carcinoembryonic Antigen | II-7 |
| 77 | Carcinoembryonic Antigen | Polyclonal |
| 83 | CD56 | 123C3 |
| 91 | Epithelial Antigen | Ber-EP4 |
| 92 | Epithelial Membrane Antigen | E29 |
| 92 | ERCC1 | 4F9 |
| 98 | Ki-67 Antigen | MIB-1 |
| 106 | p53 Protein | DO-7 |
| 107 | Podoplanin | D2-40 |
| 110 | S100 | Polyclonal |
| 110 | Synaptophysin | DAK-SYNAP |
| 112 | Thyroid Transcription Factor, TTF-1 | 8G7G3/1 |
| 113 | Vimentin | V9 |



*Small cell carcinoma of the lung stained with Anti-CD56, Code IR628/IS628.*



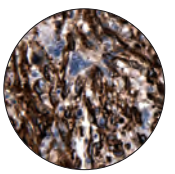
*Small cell lung cancer (FFPE) stained with FLEX Anti-Synaptophysin, Code IR660.*



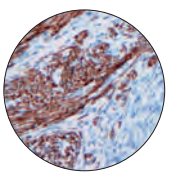
*Lung adenocarcinoma stained with Anti-Epithelial Antigen, Code IR637/IS637.*

## FLEX RTU Antibodies | Skeletal Muscles

| Page | Anti- | Clone |
|---|---|---|
| 76 | Caldesmon | h-CD |
| 90 | Desmin | D33 |
| 73 | Muscle Actin | HHF35 |
| 104 | Myogenin | F5D |
| 104 | Myosin Heavy Chain, Smooth Muscle | SMMS-1 |
| 73 | Smooth Muscle Actin | 1A4 |



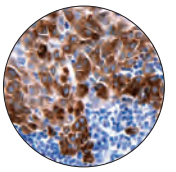
*Leiomyosarcoma stained with Anti-Caldesmon, Code IR054/IS054.*



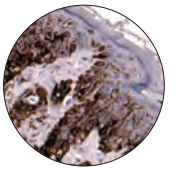
*Leiomyosarcoma stained with Anti-Desmin, Code IR606/IS606.*

## FLEX RTU Antibodies | Skin

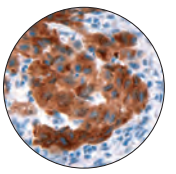
| Page | Anti- | Clone |
|---|---|---|
| 82 | CD45, Leucocyte Common Antigen | 2B11 + PD7/ 26 |
| 90 | E-Cadherin | NCH-38 |
| 92 | Epithelial Membrane Antigen | E29 |
| 100 | Melan-A | A103 |
| 101 | Melanosome | HMB-45 |
| 110 | S100 | Polyclonal |
| 116 | S100 + Tyrosinase Melan-A | Polyclonal + T311 + A103 |
| 73 | Smooth Muscle Actin | 1A4 |
| 110 | Synaptophysin | DAK-SYNAP |
| 112 | Tyrosinase | T311 |



*Melanoma stained with Anti-Melan-A, Code IR633/ IR633.*



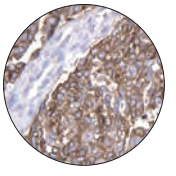
*Melanoma stained with Anti-Melanosome, Code IR052/IS052.*



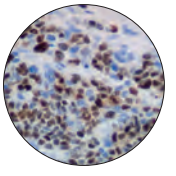
*Malignant melanoma stained with Anti-Tyrosinase, Code IR061/IS061.*

## FLEX RTU Antibodies | Soft Tissue and Bones

| Page | Anti- | Clone |
|---|---|---|
| 81 | CD31, Endothelial Cell | JC70A |
| 82 | CD34 Class II | QBEnd 10 |
| 84 | CD68 | KP1 |
| 84 | CD68 | PG-M1 |
| 84 | CD99, MIC2 Gene Products, Ewing's Sarcoma Marker | 12E7 |
| 90 | Desmin | D33 |
| 92 | Epithelial Membrane Antigen | E29 |
| 98 | Ki-67 Antigen | MIB-1 |
| 100 | Melan-A | A103 |
| 101 | Melanosome | HMB-45 |
| 73 | Muscle Actin | HHF35 |
| 104 | Myogenin | F5D |
| 104 | Myosin Heavy Chain, Smooth Muscle | SMMS-1 |
| 106 | p53 Protein | DO-7 |
| 107 | Podoplanin | D2-40 |
| 110 | S100 | Polyclonal |
| 73 | Smooth Muscle Actin | 1A4 |
| 110 | Synaptophysin | DAK-SYNAP |
| 113 | Vimentin | V9 |
| 114 | Von Willebrand Factor | Polyclonal |
| 114 | Wilms' Tumor 1 Protein | 6F-H2 |



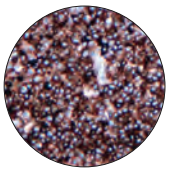
*Ewing's sarcoma stained with Anti-CD99, Code IR057/IS057.*



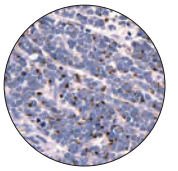
*Rhabdomyosarcoma (FFPE) stained with FLEX Anti-Myogenin, Code IR067/IS067.*

## FLEX RTU Antibodies | Undifferentiated Tumors

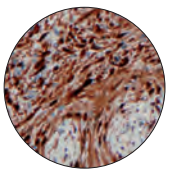
| Page | Anti- | Clone |
|---|---|---|
| 82 | CD45, Leucocyte Common Antigen | 2B11 + PD7/26 |
| 87 | Cytokeratin | AE1/AE3 |
| 110 | S100 | Polyclonal |
| 113 | Vimentin | V9 |



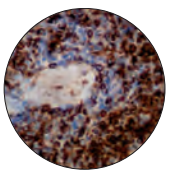
*Acute myeloid leukemia stained with Anti-CD45, Code IR751/IS751.*



*Merkel cell tumor stained with Anti-Cytokeratin, Code IR053/IS053.*



*Schmannoma stained with Anti-S100, Code IR504/IS504.*



*B-cell chronic lympocytic lymphoma stained with Anti-Vimentin, Code IR630/IS630.*

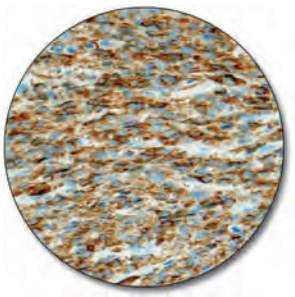
Monoclonal Mouse Anti-Human
**Actin (Muscle)**

Clone: HHF35
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0635 | Culture supernatant | 1 mL |
| IVD | IR700 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS700 | RTU★, FLEX | 30 tests, 6 mL△ |

Labels myocardial, skeletal and smooth muscle cells as well as myoepithelial cells. It also reacts with 'myofibroblasts' in the stroma of certain tumors. The antibody is a useful aid for classification of rhabdomyosarcomas, leiomyomas and leiomyosarcomas, and many carcinomas.



*Leiomyosarcoma (FFPE) stained with FLEX Anti-Actin (Muscle), Code IR700/IS700.*

Monoclonal Mouse Anti-
**Actin (Sarcomeric)**

Clone: Alpha-Sr-1
Isotype: IgM, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0874 | Culture supernatant | 1 mL |

Reacts with human sarcomeric actin expressed in striated and cardiac muscle cells. Results aid in the classification of neoplasms derived from these types of cells. Sarcomeric actin from rabbit has been used for immunization.

Monoclonal Mouse Anti-Human
**Actin (Smooth Muscle)**

Clone: 1A4
Isotype: IgG2a, kappa

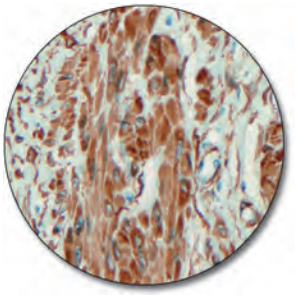
● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0851 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR611 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS611 | RTU★, FLEX | 30 tests, 6 mL△ |

This antibody labels smooth muscle cells, myofibroblasts and myoepithelial cells. It is a useful aid for classification of leiomyomas, leiomyosarcomas (1), and pleomorphic adenomas (2).

References:


1. Rizeq MN, van de Rijn M, Hendrickson MR, Rouse RV. A comparative immunohistochemical study of uterine smooth muscle neoplasms with emphasis on the epithelioid variant. Hum Pathol 1994;25:671-7.
2. Brennan PA, Umar T, Zaki GA, Langdon JD, Spedding A, Buckley J, et al. Are myoepithelial cells responsible for the widespread expression of inducible nitric oxide synthase in pleomorphic adenoma? An immunohistochemical study. J Oral Pathol Med 2000;29:279-83.

*Leiomyosarcoma (FFPE) stained with FLEX Anti-Actin (Smooth Muscle), Code IR611/IS611.*

Monoclonal Mouse Anti-
**Adrenocorticotropin (ACTH)**

Clone: 02A3
Isotype: IgG1, kappa

● Frozen ● Formalin

| | | | |
|---|---|---|---|
| IVD | M3501 | Culture supernatant | 1 mL |

Is specific for the C-terminal sequence of ACTH (ACTH 24-39) and was found not to cross-react with βLPH by radioimmunoassay. The antibody labels corticotrophs in the adenohypophysis. It may be a useful aid for classification of pituitary adenomas and for classification of primary and metastatic tumors of the pituitary.

Monoclonal Rabbit Anti-Human
**Akt-pS473, Phosphorylation Site Specific**

Clone: 14-5

| | | | |
|---|---|---|---|
| ASR | M3628 | Culture supernatant | 1 mL |

This monoclonal rabbit antibody labels activated Akt protein that is phosphorylated at serine residue 473. Akt, also known as protein kinase B (PKB) or Rac-α, is a serine/threonine protein kinase that functions as an important regulator of various cell processes including apoptosis, proliferation, differentiation and metabolism. Akt is a critical downstream effector of PI3-kinase (PI-3K), which mediates signal transduction initiated by a variety of stimuli including hormones, growth factors and cytokines. PI-3K activates Akt through a second messenger, which results in phosphorylation of Akt at threonine 308 and at serine 473 by upstream protein kinases. Activated Akt phosphorylates a number of protein substrates including BAD, caspase-9, forkhead transcription factors, GSK-3-α-β, CREB and mTOR/FRAP.

Polyclonal Rabbit Anti-Human
**Albumin**

● Formalin

| | | | |
|---|---|---|---|
| IVD | F0117 | FITC. Ig fraction | 2 mL |

**ALK Protein**

See: CD246, ALK Protein

**Dako FLEX RTU Antibodies for Liver/Biliary/Pancreas Testing**

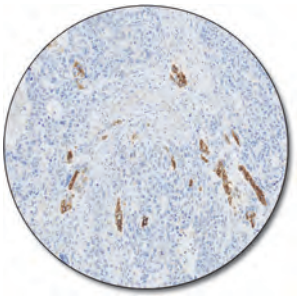
See our panel of FLEX antibodies at page 66

Polyclonal Rabbit Anti-Human
**Alpha-1-Fetoprotein**

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | A0008 | Ig fraction | 0.2 mL |
| IVD | GA500 | RTU★, FLEX **NEW** | 60 tests, 12 mL◆ |
| IVD | IR500 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS500 | RTU★, FLEX | 30 tests, 6 mL△ |

Alpha-1-fetoprotein (AFP) is a 70 kDa glycoprotein, synthesized by the cells of the embryonic yolk sac, fetal liver and fetal intestinal tract. Expression of AFP has been demonstrated in many hepatocellular carcinomas and in gonadal and extragonadal germ cells tumors, including yolk sac tumors. The antibody is a useful aid for classification of neoplastic liver diseases, yolk sac tumors and mixed germ cell tumors.



*Embryonal carcinoma (FFPE) stained with FLEX Anti-Alpha-1-Fetoprotein, Code GA500, on Dako Omnis.*

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Rabbit Anti-Human
**AMACR**

Clone: 13H4

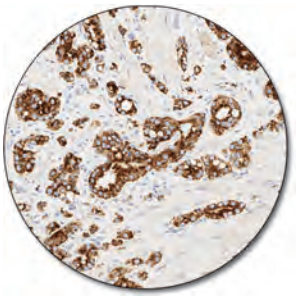
● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M3616 Culture supernatant | 0.2 mL/1 mL |
| IVD | GA060 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR060 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS060 RTU★, FLEX | 30 tests, 6 mL△ |

Recognizes a 382-amino-acid protein, alpha-methylacyl-CoA racemase (AMACR), that was identified by cDNA library subtraction in conjunction with high throughput microarray screening of prostate adenocarcinomas. AMACR, also known as P504S, is an enzyme that is involved in bile acid biosynthesis and β-oxidation of branched-chain fatty acids. Results aid in the classification of premalignant high-grade prostatic intraepithelial neoplasia (HGPIN) and prostate adenocarcinoma (1). AMACR is present at low or undetectable levels in glandular epithelial cells of normal and benign hyperplastic prostates.

Reference:

1. Luo J, Zha S, Gage WR, Dunn TA, Hicks JL, Bennett CJ, et al. Alpha-methylacyl-CoA racemase: a new molecular marker for prostate cancer. Cancer Res 2002;62:220-6.



*Prostate adenocarcinoma (FFPE) stained with FLEX Anti-AMACR, Code GA060, on Dako Omnis.*

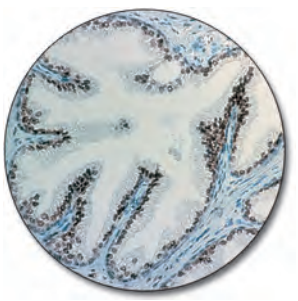
Monoclonal Mouse Anti-Human
**Androgen Receptor**

Clone: AR441
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M3562 Culture supernatant | 1 mL |

Labels the nuclei of cells known to contain the androgen receptor. In Western blot, the antibody identifies a 110 and 112 kDa doublet in extracts of the metastatic prostate cancer cell line, LNCap, and in extracts of cells transfected with the gene for androgen receptor.



*Benign prostatic hyperplasia (FFPE) stained with Anti-Androgen Receptor, Code M3562.*

Monoclonal Mouse Anti-Human
**B-Cell-Specific Activator Protein**

Clone: DAK-Pax5
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7307 Culture supernatant | 1 mL |
| IVD | GA650 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR650 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS650 RTU★, FLEX | 30 tests, 6 mL△ |

B-cell-specific activator protein, BSAP, also known as Pax-5, is a transcription factor expressed in B cells. Antibodies to BSAP may be useful for the identification of pro, pre, and mature B cells and for classification of lymphomas and subclassification of classic Hodgkin's lymphoma and anaplastic large cell lymphoma of the T and null-cell type.

*Lymph node (FFPE) stained with FLEX Anti-BSAP, Code GA650, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**BCL2 Oncoprotein**

Clone: 124
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M0887 Culture supernatant | 0.2 mL/1 mL |
| IVD | IR614 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS614 RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with the BCL2 oncoprotein encoded by a gene involved in the t(14;18) chromosomal translocation. The BCL2 oncoprotein plays a central role in apoptosis. The antibody may be a useful aid for classification of follicular lymphomas and various diffuse lymphoproliferative diseases (1).

Reference:

1. Pezzella F, Tse AGD, Cordell JL, Pulford KAF, Gatter KC, Mason DY. Expression of the *bcl-2* oncogene protein is not specific for the 14;18 chromosomal translocation. Am J Pathol 1990;137:225-32.

*Follicular lymphoma (FFPE) stained with FLEX Anti-BCL2 Oncoprotein, Code IR614/IS614.*

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**BCL6 Protein**

Clone: PG-B6p
Isotype: IgG1, kappa

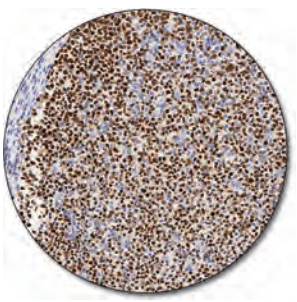
● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7211 | Culture supernatant | 0.2 mL/1 mL |
| IVD | GA625 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR625 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS625 | RTU★, FLEX | 30 tests, 6 mL△ |

The *BCL6* gene encodes a 706 amino acid nuclear protein of the Kruppel-type zinc finger protein. It is rearranged in about 30% of diffuse large B-cell lymphomas, and is expressed predominantly in normal germinal centre B cells and related lymphomas . The antibody is a useful aid for classification of follicular lymphomas, diffuse large B-cell lymphomas, Burkitt's lymphomas, and nodular, lymphocyte-predominance Hodgkin's lymphoma. The BCL6 antibody, together with BCL2 antibody, is also a useful aid in classification of mantle cell lymphomas, and nodular, lymphocyte-predominance Hodgkin's lymphoma. BCL6 protein is not expressed in B-CLL, hairy cell leukemia, mantle cell and marginal-zone derived lymphomas (1, 2).

References:

1. Flenghi L, Bigerna B, Fizzotti M, Venturi S, Pasqualucci L, Pileri S, et al. Monoclonal antibodies PG-B6a and PG-B6p recognize, respectively, a highly conserved and a formol-resistant epitope on the human BCL-6 protein amino-terminal region. Am J Pathol 1996;148:1543-55.
2. Falini B, Bigerna B, Pasqualucci L, Fizzotti M, Martelli MF, Pileri S, et al. Distinctive expression pattern of the BCL-6 protein in nodular lymphocyte predominance Hodgkin's disease. Blood 1996;87:465-71.



*Follicular lymphoma (FFPE) stained with FLEX Anti-BCL6, Code GA625, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**BCL10 Protein**

Clone: 151
Isotype: IgG1, kappa

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7260 | Culture supernatant | 0.2 mL |

BCL10 is an apoptotic regulatory molecule identified through its direct involvement in t(1;14) of mucosa-associated lymphoid tissue (MALT) lymphoma. The antibody labels subpopulations of normal B and T cells and is a useful aid for subclassification of MALT lymphomas (1).

Reference:

1. Ye H, Dogan A, Karran L, Willis TG, Chen L, Wlodarska I, et al. BCL10 expression in normal and neoplastic lymphoid tissue. Nuclear localization in MALT lymphoma. Am J Pathol 2000;157:1147-54.

Monoclonal Mouse Anti-Human
**Beta-Amyloid**

Clone: 6F/3D
Isotype: IgG1, kappa

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0872 | Culture supernatant | 1 mL |

Labels deposits of beta-amyloid in brain tissue. Formalin-fixed, paraffin-embedded tissue sections must be treated with formic acid prior to the immunohistochemical staining.

Monoclonal Mouse Anti-Human
**Beta-Catenin**

Clone: β-Catenin-1
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3539 | Culture supernatant | 1 mL |
| IVD | GA702 | RTU★, FLEX **NEW** | 60 tests, 12 mL◆ |
| IVD | IR702 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS702 | RTU★, FLEX | 30 tests, 6 mL△ |

Beta-catenin is an 88 kDa multifunctional protein playing an essential role in cell-cell adhesion by binding to the transmembrane protein, cadherin. Beta-catenin is also involved in the regulation of gene expression as a mediator of the Wnt signaling pathway. The expression and intracellular localization of beta-catenin is altered in many types of cancers.

*Colon adenocarcinoma (FFPE) stained with FLEX Anti-Beta-Catenin, Code GA702, on Dako Omnis.*

Monoclonal Mouse Anti-
**Bromodeoxyuridine**

Clone: Bu20a
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| RUO | M0744 | Culture supernatant | 1 mL |

Binds to cells which have incorporated bromodeoxyuridine into their DNA during the S-phase of the cell cycle.

Polyclonal Rabbit Anti-Human
**C1q Complement**

● Frozen

| | | | |
|---|---|---|---|
| RUO | F0254 | FITC. Ig fraction | 2 mL |

Polyclonal Rabbit Anti-Human
**C3c Complement**

● Formalin

| | | | |
|---|---|---|---|
| IVD | F0201 | FITC. Ig fraction | 2 mL |

The antigen used for immunization is C3c. Thus the antibody reacts both with C3c as well as with the C3c part of native C3 and C3b. There is no reaction with C3d and C3a.

Polyclonal Rabbit Anti-Human
**C4c Complement**

| | | | |
|---|---|---|---|
| IVD | F0169 | FITC. Ig fraction | 2 mL |



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**CA 19-9**

Clone: 1116-NS-19-9
Isotype: IgG1, kappa

● Formalin

| | | |
|---|---|---|
| IVD | M3517 Ascites | 1 mL |

Reacts with sialylated Le[a]-active pentasaccharide (sialylated lacto-N-fucopentaose II) which is enzymatically synthesized by sialylation of type 1 carbohydrate chains. The CA 19-9 antigen has been immunohistochemically demonstrated in ductal epithelium of the breast, kidney, salivary glands and sweat glands. The antibody reacts with epithelium of the lung and the colon, pancreatic acini and ducts, biliary epithelium in the liver and ductal epithelium of the prostate. Results aid in the classification of gastrointestinal carcinomas, including adenocarcinomas of the stomach, intestine, and pancreas.

Monoclonal Mouse Anti-Human
**CA 125**

Clone: M11
Isotype: IgG1, kappa

● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M3520 Ascites | 1 mL |
| IVD | GA701 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR701 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS701 RTU★, FLEX | 30 tests, 6 mL△ |

Recognizes a mucin-like glycoprotein larger than 200 kDa, expressing the CA 125 epitope. The antibody is a useful aid for classification of a variety of tumors, such as some adenocarcinomas of the colon, breast carcinomas, malignant mesothelioma, uterine adenomatoid tumor, lung bronchoalveolar carcinoma, and ovarian endometrioid and serous carcinomas. Results may also aid in the classification of adenocarcinomas (1).

Reference:

1. Neal S. Goldstein, MD. Immunophenotypic characterization of 225 prostate adenocarcinomas with intermediate or high Gleason scores. Am J Clin Pathol 2002;117:471-7.

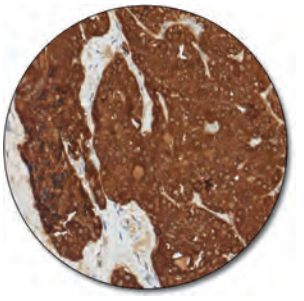
*Ovarian carcinoma (FFPE) stained with FLEX Anti-CA 125, Code GA701, on Dako Omnis.*

Polyclonal Rabbit Anti-Human
**Calcitonin**

● Formalin ● HIER

| | | |
|---|---|---|
| IVD | A0576 Ig fraction | 1 mL |
| IVD | GA515 RTU★, FLEX **NEW** | 60 tests, 12 mL◆ |
| IVD | IR515 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS515 RTU★, FLEX | 30 tests, 6 mL△ |

Calcitonin is a 32 amino acid peptide hormone, produced in the parafollicular C cells of the thyroid. Calcitonin acts through its receptors, causing osteoclast-mediated bone resorption and calcium excretion by the kidney. The antibody is useful for the identification of calcitonin-producing C cells and is a useful aid for classification of medullary thyroid carcinoma.



*Thyroid medullary carcinoma (FFPE) stained with FLEX Anti-Calcitonin, Code GA515, on Dako Omnis.*

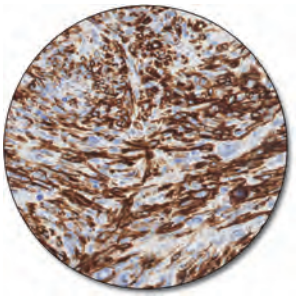
Monoclonal Mouse Anti-Human
**Caldesmon**

Clone: h-CD
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme + HIER

| | | |
|---|---|---|
| IVD | M3557 Culture supernatant | 1 mL |
| IVD | GA054 RTU★, FLEX **NEW** | 60 tests, 12 mL◆ |
| IVD | IR054 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS054 RTU★, FLEX | 30 tests, 6 mL△ |

Caldesmon is a smooth muscle-specific protein involved in the regulation of smooth muscle contraction. The antibody recognizes the high molecular mass variant of caldesmon (h-caldesmon) and does not react with the non-muscle variant.



*Leiomyosarcoma (FFPE) stained with FLEX Anti-Caldesmon, Code GA054, on Dako Omnis.*

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**Calponin**

Clone: CALP
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme + HIER

| | | | |
|---|---|---|---|
| IVD | M3556 | Culture supernatant | 1 mL |

Calponin is a developmentally regulated protein thought to play a role in the regulation of the thin filament-associated system of smooth muscle contraction. On Western blots, the antibody reacts with a 34 kDa protein (calponin) found in tissue extracts from smooth muscle, but not in fibroblast extracts.

*Fibroadenoma (FFPE) stained with Anti-Calponin, Code M3556.*

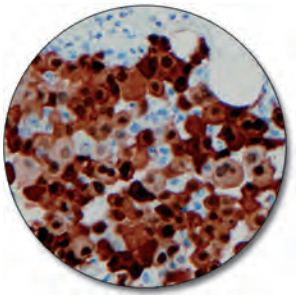
Monoclonal Mouse Anti-Human
**Calretinin**

Clone: DAK-Calret 1
Isotype: IgG1, kappa

● Formalin ● Enzyme/HIER

| | | | |
|---|---|---|---|
| IVD | M7245 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR627 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS627 | RTU★, FLEX | 30 tests, 6 mL△ |

Calretinin is a 32 kDa member of the superfamily of calcium-binding proteins. It is abundantly expressed in central and peripheral neural tissues, particularly in the retina and in the neurons of the sensory pathways, and calretinin may play an important role in the survival of nerve cells during disturbances in calcium homeostasis. Calretinin is also expressed by mesothelial cells, and the antibody is a useful aid for classification of malignant mesotheliomas of the epithelial type.



*Mesothelioma (FFPE) stained with FLEX Anti-Calretinin, Code IR627/IS627.*

Monoclonal Mouse Anti-Human
**Carcinoembryonic Antigen (CEA)**

Clone: II-7
Isotype: IgG1, kappa

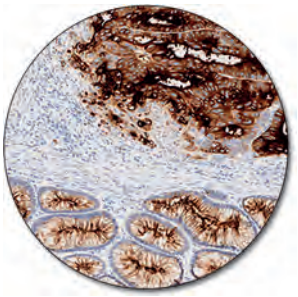
● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7072 | Culture supernatant | 0.2 mL/1 mL |
| IVD | GA622 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR622 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS622 | RTU★, FLEX | 30 tests, 6 mL△ |

Monoclonal antibodies to CEA have been classified into five essentially non-interacting epitope groups, designated Gold 1 to 5. Dako Anti-CEA, clone II-7, belongs to epitope group Gold 1 and shows a high degree of CEA specificity (1). The antibody is a useful aid for classification of adenocarcinomas, notably in the gastrointestinal tract, including colonic and pancreatic carcinomas. Results also aid in the classification of secretory meningiomas (2) and medullary carcinoma of the thyroid (3).

References:

1. Nap M, Hammarström ML, Börmer O, Hammarström S, Wagener C, Handt S, et al. Specificity and affinity of monoclonal antibodies against carcinoembryonic antigen. Cancer Res 1992;52:2329-39.
2. Probst-Cousin S, Villagran-Lillo R, Lahl R, Bergmann M, Schmid KW, Gullotta F. Secretory meningioma. Clinical, histologic, and immunohistochemical findings in 31 cases. Cancer 1997;79:2003-15.
3. Uribe M, Fenoglio-Preisler CM, Grimes M, Feind C. Medullary carcinoma of the thyroid gland. Am J Surg Pathol 1985;9:577-94.

*Colon adenocarcinoma (FFPE) stained with FLEX Anti-CEA, Code GA622, on Dako Omnis.*

Polyclonal Rabbit Anti-Human
**Carcinoembryonic Antigen (CEA)**

● Formalin ● Enzyme

| | | | |
|---|---|---|---|
| IVD | GA526 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR526 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS526 | RTU★, FLEX | 30 tests, 6 mL△ |

The antibody has been absorbed with blood group antigens A and B, and insolubilized normal human plasma. The antibody shows a strong reaction with CEA and CEA-like proteins, such as CEACAM1 (biliary glycoprotein, BGP1) and CEACAM6 (non-specific cross-reacting antigen, NCA).

Reference:

1. Sheahan K, O'Brien MJ, Burke B, Dervan PA, O'Keane JC, Gottlieb LS, et al. Differential reactivities of carcinoembryonic antigen (CEA) and CEA-related monoclonal and polyclonal antibodies in common epithelial malignancies. Am J Clin Pathol 1990;94:157-64.

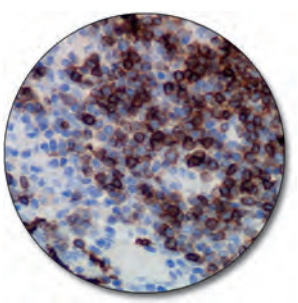

Monoclonal Mouse Anti-Human
**CD1a**

Clone: 010
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3571 | Culture supernatant | 1 mL |
| IVD | IR069 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS069 | RTU★, FLEX | 30 tests, 6 mL△ |

CD1a, a member of the CD1 antigen family, is a non-polymorphic MHC class I-related cell surface glycoprotein expressed in association with $ß_2$-microglobulin. Langerhans' cells, interdigitating dendritic cells and medullary thymocytes in thymic medulla are labeled by anti-CD1a. This antibody is a useful aid for classification of thymomas and malignancies of T-cell precursors.



*Thymoma (FFPE) stained with FLEX Anti-CD1a, Code IR069/IS069.*

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**CD2**

Clone: AB75
Isotype: IgG1, kappa

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7309 | Culture supernatant | 1 mL |
| IVD | GA651 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR651 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS651 | RTU★, FLEX | 30 tests, 6 mL△ |

CD2 is a transmembrane glycoprotein that is considered a pan-T-cell antigen expressed on the majority of thymocytes and virtually all peripheral T lymphocytes. The antibody may be a useful aid for classification of peripheral T-cell lymphoma, anaplastic large cell lymphoma and precursor T-cell lymphoma.

*Precursor T-lymphoblastic lymphoma (FFPE) stained with FLEX Anti-CD2, Code GA651, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**CD3**

Clone: F7.2.38
Isotype: IgG1, kappa

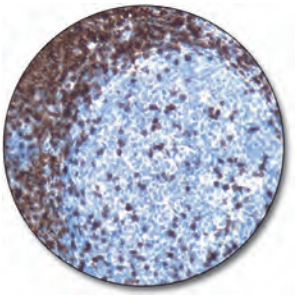
● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7254 | Culture supernatant | 0.2 mL/1 mL |

CD3 is expressed by peripheral T cells, thymocytes, and activated natural killer cells. The antibody is a useful aid for classification of T-cell neoplasms. The antibody recognizes an epitope on the intracytoplasmic portion of the ε-chain of CD3. The performance of the F7.2.38 antibody is comparable to Dako Polyclonal Rabbit Anti-Human CD3, Code A0452 (1).

Reference:

1. Alibaud L, Llobera R, Al Saati T, March M, Delsol G, Rubin B. A new monoclonal anti-CD3ε antibody reactive on paraffin sections. J Histochem Cytochem 2000;48:1609-16.



*Tonsil (FFPE) stained with Anti-CD3, Code M7254.*

Polyclonal Rabbit Anti-Human
**CD3**

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | A0452 | Affinity isolated | 0.2 mL/1 mL |
| IVD | GA503 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR503 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS503 | RTU★, FLEX | 30 tests, 6 mL△ |

Synthetic peptide from the intracellular part of the ε-chain of human CD3 was coupled to bovine thyroglobulin and used for immunization. The antibody is a pan-T cell marker for identification of T cells. It is well-suited for labeling reactive T cells in tissue with lymphoid infiltrates, and for classification of T-cell neoplasms. The antibody shows a stronger labeling intensity than corresponding monoclonal antibodies to CD3, and should, generally, be preferred on formalin-fixed, paraffin-embedded tissue sections.

*T-cell lymphoma (FFPE) stained with FLEX Anti-CD3, Code GA503, on Dako Omnis.*

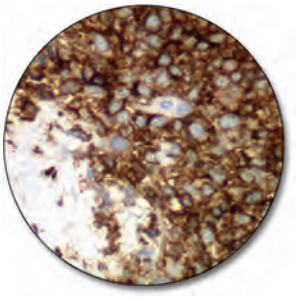
Monoclonal Mouse Anti-Human
**CD4**

Clone: 4B12
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7310 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR649 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS649 | RTU★, FLEX | 30 tests, 6 mL△ |

CD4 is a transmembrane glycoprotein, expressed on normal thymocytes, T-helper cells, majority of mature peripheral T cells, and a subset of suppressor or cytotoxic T cells. CD4 is not found on immature thymocytes. The antibody is a useful aid for classification of anaplastic large cell lymphomas, unspecified peripheral T-cell lymphomas and mycosis fungoides.



*Peripheral T-cell lymphoma (FFPE) stained with FLEX Anti-CD4, Code IR649/IS649.*

Monoclonal Mouse Anti-Human
**CD5**

Clone: 4C7
Isotype: IgG1, kappa

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3641 | Culture supernatant | 1 mL |
| IVD | IR082 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS082 | RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with CD5 expressed on B and T cells and may be a useful aid for theclassification of B and T-cell malignancies. This includes B-cell chronic lymphoid leukemia (B-CLL), B-cell small lymphocytic lymphoma (B-SLL), mantle cell lymphoma (MCL) and T-cell lymphoma and leukemia.

*Mantle cell lymphoma (FFPE) stained with FLEX Anti-CD5, Code IR082/IS082.*

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**CD7**

Clone: CBC.37
Isotype: IgG2b, kappa

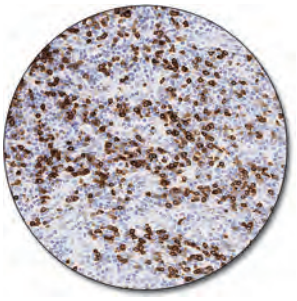
● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7255 Culture supernatant | 1 mL |
| IVD | GA643 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR643 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS643 RTU★, FLEX | 30 tests, 6 mL△ |

CD7 is expressed by the majority of peripheral blood T cells, NK cells, and all thymocytes. It is one of the earliest surface antigens on T and NK-cell lineages. The antibody is a useful aid for classification of T-cell malignancies (1).

Reference:

1. Al Saati T, Alibaud L, Lamant L, Boyes J, March M, Delsol G. A new monoclonal anti-CD7 antibody reactive on paraffin sections. Appl Immunohistochem Mol Morphol 2001;9:289-96.



*Lymphoma (FFPE) stained with FLEX Anti-CD7, Code GA643, on Dako Omnis.*

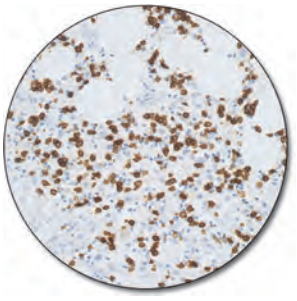
Monoclonal Mouse Anti-Human
**CD8**

Clone: C8/144B
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7103 Culture supernatant | 1 mL |
| IVD | GA623 RTU★, FLEX **NEW** | 60 tests, 12 mL◆ |
| IVD | IR623 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS623 RTU★, FLEX | 30 tests, 6 mL△ |

CD8 is a 68 kDa transmembrane glycoprotein expressed as a heterodimer by a majority of thymocytes, and by class I major histocompatibility complex restricted, mature, suppressor/cytotoxic T cells. The antibody is a useful aid for classification of cytotoxic/suppressor T-cell lymphomas.



*Angioimmunoblastic T-cell lymphoma (FFPE) stained with FLEX Anti-CD8, Code GA623, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**CD10**

Clone: 56C6
Isotype: IgG1

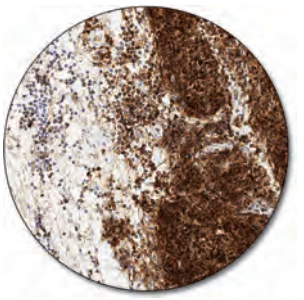
● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7308 Culture supernatant | 0.2 mL/1 mL |
| IVD | GA648 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR648 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS648 RTU★, FLEX | 30 tests, 6 mL△ |

CD10 is a cell surface metallopeptidase, expressed on early lymphoid progenitor cells and on a small subset of immature B cells in bone marrow, but is lost as the cells reach maturation. CD10 is, however, re-expressed on proliferating B cells and mature neutrophils. Various non-lymphoid cells, including bile canaliculi and renal glomerular and tubular epithelial cells are also CD10-positive. The antibody may be a useful aid for classification of Burkitt's lymphoma, follicular lymphoma except grade III, precursor B-cell acute lymphoblastic leukemia, and clear cell renal cell carcinoma. Futhermore, CD10 antibodies may also be a useful aid in the subclassification of the mature T-cell neoplasia subtype and angioimmunoblastic T-cell lymphoma. Anti-CD10, Clone 56C6, is well-suited for use on formalin-fixed tissue sections.

Reference:

1. Attygalle A, Al-Jehani R, Diss TC, Munson P, Liu H, Du M-Q, et al. Neoplastic T cells in angioimmunoblastic T-cell lymphoma express CD10. Blood 2002;99:627-33.



*Lymphoma (FFPE) stained with FLEX Anti-CD10, Code GA648, on Dako Omnis.*

**Dako FLEX RTU Antibodies for Kidney/Urinary Tract Testing**

See our panel of FLEX antibodies at page 66

Monoclonal Mouse Anti-Human
**CD14**

Clone: TÜK4
Isotype: IgG2a, kappa

● Frozen

| | | |
|---|---|---|
| IVD | M0825 Culture supernatant | 1 mL |

CD14 is a 55 kDa protein which functions as a receptor for the complex of lipopolysaccharide (LPS) and LPS-binding protein (LBP). CD14 is primarily expressed on monocytes and macrophages. The antibody is a useful aid for classification of neoplastic cells of the monocytic cell lineage.

Reference:

1. Wright SD, Ramos RA, Tobias PS, Ulevitch RJ, Mathison JC. CD14, a receptor for complexes of lipopolysaccharide (LPS) and LPS binding protein. Science 1990;249:1431-3.



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**CD15**

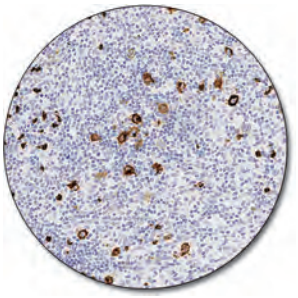
Clone: Carb-3
Isotype: IgM

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3631 | Culture supernatant | 0.2 mL/1 mL |
| IVD | GA062 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR062 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS062 | RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with a carbohydrate antigen, termed Lewis X (Lex), X hapten or CD15 antigen, expressed on Reed-Sternberg cells and various other cell types including myeloid cells and epithelial cells. Results aid in the classification of acute myeloid leukemia and chronic myelogenous leukemia, as well as carcinomas derived from various organs (1). The antibody is of value in the identification of Reed-Sternberg cells for classification of Hodgkin's lymphoma.

Reference:
1. Arber DA, Weiss LM. CD15: a review. Applied Immunohistochem 1993;1:17-30.



*Hodgkin's Lymphoma (FFPE) stained with FLEX Anti-CD15, Code GA062, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**CD19**

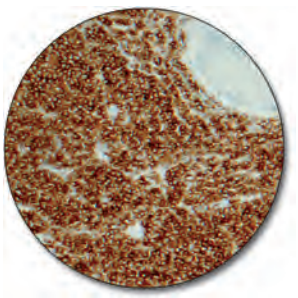
Clone: LE-CD19
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7296 | Culture supernatant | 0.2 mL |
| IVD | IR656 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS656 | RTU★, FLEX | 30 tests, 6 mL△ |

CD19 is the broadest lineage-specific surface marker for B cells. CD19 is present on the surface of virtually all B lymphocytes, including early B-progenitor cells, but it is lost upon terminal differentiation to plasma cells. CD19 is also expressed on follicular dendritic cells (1). Results aid in the classification of B-lineage leukemias and lymphomas.

Reference:
1. Sato S, Tedder TF. BC3. CD19 workshop panel report. In: Kishimoto T, Kikutani H, von dem Borne AEG, Goyert SM, Mason DY, Miyasaka M, et al., editors. Leucocyte typing VI. White cell differentiation antigens. Proceedings of the 6th International Workshop and Conference; 1996 Nov 10-14; Kobe, Japan. New York, London: Garland Publishing Inc.; 1997. p. 133-5.



*Precursor B-cell lymphoblastic leukemia/lymphoma (FFPE) stained with FLEX Anti-CD19, Code IR656/IS656.*

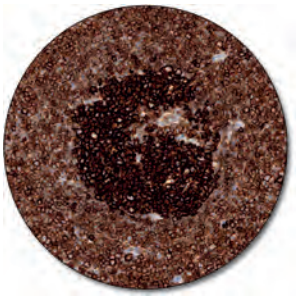
Monoclonal Mouse Anti-Human
**CD20cy**

Clone: L26
Isotype: IgG2a, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0755 | Culture supernatant | 0.2 mL/1 mL |
| IVD | GA604 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR604 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS604 | RTU★, FLEX | 30 tests, 6 mL△ |

CD20 is a transmembrane, non-glycosylated protein expressed on B-cell precursors and mature B cells, but is lost following differentiation into plasma cells. In resting B cells, CD20 appears in a 33 kDa non-phosphorylated form. After mitogen stimulation, CD20 becomes heavily phosphorylated (35-37 kDa isoforms), and it is a dominant phosphoprotein in activated B cells. The antibody reacts with an intracytoplasmic epitope localized on the CD20 antigen and labels cells of the B-cell lineage. It is a useful aid for classification of neoplasms of B-cell derivation.



*B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma (FFPE) stained with FLEX Anti-CD20cy, Code GA604, on Dako Omnis.*

**Dako FLEX RTU Antibodies for Lymphatic Tissue Testing**

See our panel of FLEX antibodies at page 67

Monoclonal Mouse Anti-Human
**CD21**

Clone: 1F8
Isotype: IgG1, kappa

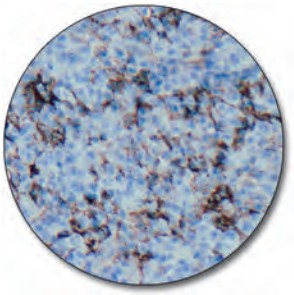
● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0784 | Culture supernatant | 1 mL |
| IVD | IR608 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS608 | RTU★, FLEX | 30 tests, 6 mL△ |

CD21 is a transmembrane glycoprotein belonging to a family of complement regulatory proteins. It is expressed by follicular dendritic cells (FDC) and mature B cells, as well as by several types of epithelial cells. The antibody is a useful aid for classification of malignant lymphomas. Furthermore, the antibody may be useful for the subclassification of mature T-cell lymphoma of the angioimmunoblastic subtype.

References:
1. Bagdi E, Krenacs L, Krenacs T, Miller K, Isaacson PG. Follicular dendritic cells in reactive and neoplastic lymphoid tissues: a reevaluation of staining patterns of CD21, CD23, and CD35 antibodies in paraffin sections after wet heat-induced epitope retrieval. Appl Immunohistochem Mol Morphol 2001;9:117-24.
2. Troxell ML, Schwartz EJ, van de Rijn M, Ross DT, Warnke RA, Higgins JP, et al. Follicular dendritic cell immunohistochemical markers in angioimmunoblastic T-cell lymphoma. Appl Immunohistochem Mol Morphol 2005;13:297-303.

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections



*Follicular lymphoma (FFPE) stained with FLEX Anti-CD21, Code IR608/IS608.*

Monoclonal Mouse Anti-Human
**CD23**

Clone: DAK-CD23
Isotype: IgG1, kappa

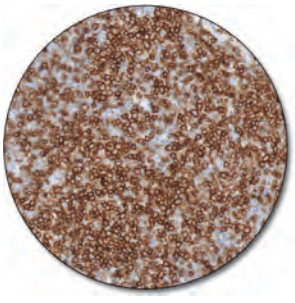
● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7312 | Culture supernatant | 1 mL |
| IVD | GA781 | RTU★, FLEX **NEW** | 60 tests, 12 mL◆ |
| IVD | IR781 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS781 | RTU★, FLEX | 30 tests, 6 mL△ |

CD23 is primarily expressed on B cells and monocytes, including a strong expression on Epstein-Barr Virus-transformed B lymphoblasts. Anti-CD23 is a useful aid for classification of CD23-positive B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma (1).

Reference:

1. Rossi S, Laurino L, Furlanetto A, Chinellato S, Orvieto E, Canal F, et al. Rabbit monoclonal antibodies: a comparative study between a novel category of immunoreagents and the corresponding mouse monoclonal antibodies. Am J Clin Pathol 2005;124:295-302.



*Chronic lymphocytic leukemia/small lymphocytic lymphoma (FFPE) stained with FLEX Anti-CD23, Code GA781, on Dako Omnis.*

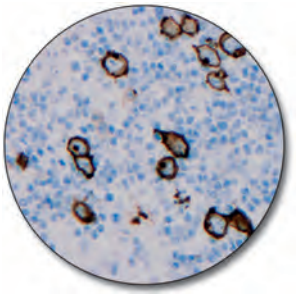
Monoclonal Mouse Anti-Human
**CD30**

Clone: Ber-H2
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0751 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR602 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS602 | RTU★, FLEX | 30 tests, 6 mL△ |

CD30 is a transmembrane cytokine receptor belonging to the tumor necrosis factor (TNF) receptor superfamily. Mature CD30 has a molecular mass of 120 kDa. The intracellular part of CD30 possesses kinase activity, indicating a role in differentiation and/or proliferation. CD30 expression is found on Hodgkin's and Reed-Sternberg cells, and on activated B and T lymphocytes. CD30 is also expressed by embryonal carcinoma cells. This antibody is a useful aid for the classification of anaplastic large cell lymphoma.



*Hodgkin's lymphoma (FFPE) stained with FLEX Anti-CD30, Code IR602/IS602.*

Monoclonal Mouse Anti-Human
**CD31, Endothelial Cell**

Clone: JC70A
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0823 | Culture supernatant | 0.2 mL/1 mL |
| IVD | GA610 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR610 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS610 | RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with a 130 kDa glycoprotein, also designated platelet endothelial cell adhesion molecule-1 (PECAM-1). The antibody strongly labels endothelial cells and is a useful aid for classification of neoplasms arising from endothelial cells.

Reference:

1. Parums DV, Cordell JL, Micklem K, Heryet AR, Gatter KC, Mason DY. JC70: a monoclonal antibody that detects vascular endothelium associated antigen on routinely processed tissue sections. J Clin Pathol 1990;43:572-7.

*Angiosarcoma (FFPE) stained with FLEX Anti-CD31, Code GA610, on Dako Omnis.*



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

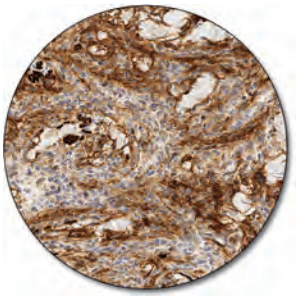
Monoclonal Mouse Anti-Human
**CD34 Class II**

Clone: QBEnd 10
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme/HIER

| | | |
|---|---|---|
| IVD | M7165 Culture supernatant | 0.2 mL/1 mL |
| IVD | GA632 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR632 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS632 RTU★, FLEX | 30 tests, 6 mL△ |

CD34 is a single-chain transmembrane protein of approximately 116 kDa, expressed on immature hematopoietic stem/progenitor cells, capillary endothelial cells, embryonic fibroblasts and rare glial cells in nervous tissue. CD34 is a stage-specific, rather than a lineage-specific, leucocyte differentiation antigen. The antibody is a useful aid for classificaction of vascular and lymphatic tumors and for the subclassification of leukemias.



*Angiosarcoma (FFPE) stained with FLEX Anti-CD34,Code GA632, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**CD35**

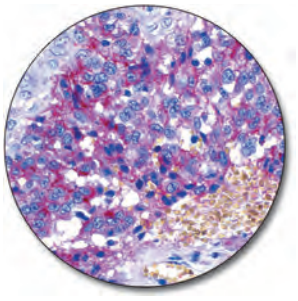
Clone: Ber-MAC-DRC
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M0846 Culture supernatant | 1 mL |

Reacts with a formalin-resistant epitope of the receptor (CR1) for the C3b fragment of human complement C3. The antibody is well-suited for the demonstration of follicular dendritic cells.

Reference:
1. Yamakawa M, Imay Y. Complement activation in the follicular light zone of human lymphoid tissues. Immunology 1992;76:378-84.



*Follicular dendritic cell sarcoma (FFPE) stained with Anti-CD35, Code M0846.*

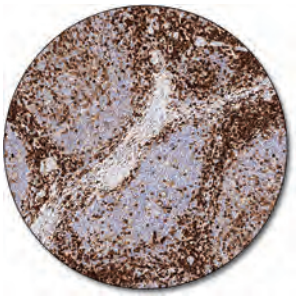
Monoclonal Mouse Anti-Human
**CD43**

Clone: DF-T1
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M0786 Culture supernatant | 1 mL |
| IVD | GA636 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR636 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS636 RTU★, FLEX | 30 tests, 6 mL△ |

CD43 is an integral membrane protein typically expressed at high levels on all leucocytes, except most resting B lymphocytes. Antibodies to CD43 may be a useful aid for the classification of low-grade B-cell lymphomas and myeloid disorders.



*Tonsil (FFPE) stained with FLEX Anti-CD43, Code GA636, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**CD44, Phagocytic Glycoprotein-1**

Clone: DF1485
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7082 Culture supernatant | 1 mL |

CD44 is an adhesion molecule, which binds hyaluronic acid and participates in a number of cell-cell interactions, including lymphocyte homing. CD44 is expressed on approximately 90% of lymphocytes, monocytes, granulocytes, and, in lower amounts on thymocytes, fibroblasts, and erythrocytes. Platelets lack CD44. In non-hematopoietic tissues, CD44 is widely distributed.

Reference:
1. Horny HP, Menke DM, Kaiserling E. Neoplastic human tissue mast cells express the adhesion molecule CD44/HCAM. Virchows Arch 1996;429:91-4.

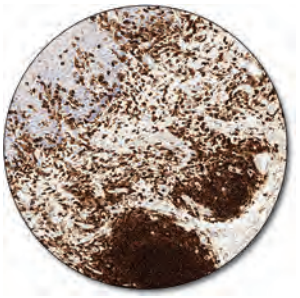
Monoclonal Mouse Anti-Human
**CD45, Leucocyte Common Antigen**

Clone: 2B11 + PD7/26
Isotype: IgG1, kappa + IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M0701 Culture supernatant | 0.2 mL/1 mL |
| IVD | GA751 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR751 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS751 RTU★, FLEX | 30 tests, 6 mL△ |

CD45 is a transmembrane glycoprotein expressed on most nucleated cells of hematopoetic origin. On human leucocytes, five different isoforms of CD45 have been identified, named ABC, AB, BC, B and 0. Clone 2B11 reacts with all known isotypes of the CD45 family and clone PD7/26 has been clustered as anti-CD45RB. The antibody is a useful aid for classification of lymphoid neoplasms.



*Tonsil (FFPE) stained with FLEX Anti-CD45, Code GA751, on Dako Omnis.*

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

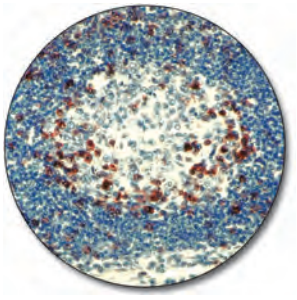
Monoclonal Mouse Anti-Human
**CD45R0**

Clone: UCHL1
Isotype: IgG2a, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0742 | Culture supernatant | 1 mL |

CD45 is a transmembrane glycoprotein expressed on most nucleated cells of hematopoetic origin. On human leucocytes, five different isoforms of CD45 have been identified, named ABC, AB, BC, B and 0. This antibody reacts with an epitope unique for CD45R0. The antibody labels most thymocytes, a subpopulation of resting T cells within both CD4 and CD8 subsets, and mature, activated T cells. It is effective on formalin-fixed, paraffin-embedded tissue sections. Results aid in the classification of T-cell neoplasms.



*Lymph node (FFPE) stained with Anti-CD45R0, Code M0742.*

Monoclonal Mouse Anti-Human
**CD45RA**

Clone: 4KB5
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0754 | Culture supernatant | 1 mL |

Labels most B cells in peripheral blood and tissue sections. A small proportion of T cells and monocytes is also labeled.

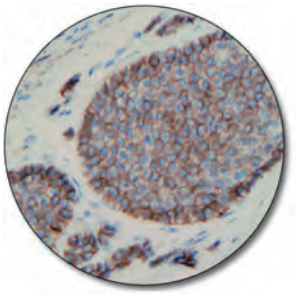
Monoclonal Mouse Anti-Human
**CD56**

Clone: 123C3
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7304 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR628 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS628 | RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with natural killer cells and a subset of CD4+ and CD8+ T cells in peripheral blood. The antibody is a useful aid for classification of CD56+ T/NK-cell lymphomas. Outside the hematopoietic system, CD56 is expressed in a number of tumors, including neuroblastomas and small cell lung cancer (SCLC).



*Carcinoid tumor (FFPE) stained with FLEX Anti-CD56, Code IR628/IS628.*

Monoclonal Mouse Anti-Human
**CD57**

Clone: TB01
Isotype: IgM, kappa

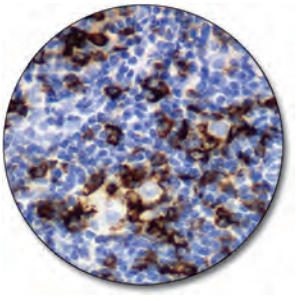
● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7271 | Culture supernatant | 0.2 mL |
| IVD | IR647 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS647 | RTU★, FLEX | 30 tests, 6 mL△ |

CD57 is expressed by subsets of NK cells and CD8+ lymphocytes, and by a small percentage of CD4+/CD45R0+ T lymphocytes in lymph node germinal centres. The number of CD57+ cells increases in some pathologies characterized by an imbalance of CD4/CD8 lymphocytes. Normal neuroectodermal cells and striated muscle also express CD57. Antibodies to CD57 may be a useful aid for classification of T-cell large granular lymphocyte disorders, oligodendrogliomas and neuroendocrine tumors, and may also aid in the classification of lymphocyte predominant Hodgkin's lymphoma.

Reference:

1. Funaro A, Malavasi F. NK5. CD57 Workshop panel report. In: Kishimoto T, Kikutani H, von dem Borne AEG, Goyert SM, Mason DY, Miyasaka M, et al., editors. Leucocyte typing VI. White cell differentiation antigens. Proceedings of the 6th International Workshop and Conference; 1996 Nov 10-14; Kobe, Japan. New York, London: Garland Publishing Inc.; 1997. p. 274-6.



*Hodgkin's lymphoma, lymphocyte predominant subtype, (FFPE) stained with FLEX Anti-CD57, Code IR647/IS647.*

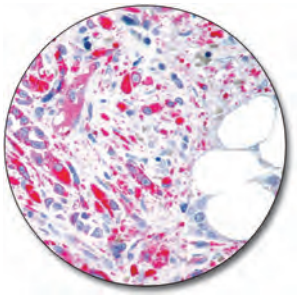
Monoclonal Mouse Anti-Human
**CD61, Platelet Glycoprotein IIIa**

Clone: Y2/51
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme/HIER

| | | | |
|---|---|---|---|
| IVD | M0753 | Culture supernatant | 1 mL |

Platelet glycoprotein IIIa (GpIIIa) is identical to the β3-integrin subunit, which can associate with the αV-chain (CD51) to form vitronectin receptor, or with the αIIb-chain (CD41) to form the GpIIb/GpIIIa complex (CD41/CD61). The antibody detects platelets in smears of blood and bone marrow, as well as megakaryocytes in frozen sections and cell smears. The antibody is a useful aid for classification of megakaryoblastic leukemia.



*Acute megakaryoblastic (M7) leukemia (FFPE) stained with Anti-CD61, Code M0753.*



▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**CD68**

Clone: EBM11
Isotype: IgG1, kappa

● Frozen

| | | |
|---|---|---|
| IVD | M0718 Culture supernatant | 1 mL |

Labels human monocytes and macrophages and can be used for identifying a population of cells as being of mononuclear phagocyte origin and for demonstrating the macrophage origin of giant cells.

Monoclonal Mouse Anti-Human
**CD68**

Clone: KP1
Isotype: IgG1, kappa

● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M0814 Culture supernatant | 1 mL |
| IVD | GA609 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR609 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS609 RTU★, FLEX | 30 tests, 6 mL△ |

Labels human monocytes, macrophages and myeloid cells. It is of value for demonstrating reactive macrophages in a wide variety of normal and pathological specimens and for the identification of myeloid and histiocytic cells. Results aid in the classification of neoplasms of myeloid and macrophage/monocyte origin.

*Tonsil (FFPE) stained with FLEX Anti-CD68, Code GA609, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**CD68**

Clone: PG-M1
Isotype: IgG3, kappa

● Frozen ● Formalin ● (Enzyme)/HIER

| | | |
|---|---|---|
| IVD | M0876 Culture supernatant | 0.2 mL/1 mL |
| IVD | GA613 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR613 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS613 RTU★, FLEX | 30 tests, 6 mL△ |

Labels human monocytes and macrophages, but not myeloid cells. The antibody is of value for demonstration of monocytes and macrophages in normal and pathological specimens. Results aid in the classification of acute myeloid leukemia (AML), and histiocytic sarcoma.

*Tonsil (FFPE) stained with FLEX Anti-CD68, Code GA613, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**CD79α**

Clone: JCB117
Isotype: IgG1, kappa

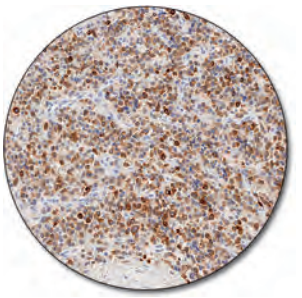
● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7050 Culture supernatant | 0.2 mL/1 mL |
| IVD | GA621 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR621 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS621 RTU★, FLEX | 30 tests, 6 mL△ |

CD79α is encoded by the mb-1 gene and was previously called Igα. The antibody recognizes an extracellular epitope expressed on the CD79α molecule. Results aid in the classification of B-cell neoplasms in routine biopsy material. In addition to the expression in B cells, CD79α has been found to be co-expressed with CD3 in 10% of cases of T-lymphoblastic leukemia/lymphoma. Antibodies to CD79α may also be a useful aid for classification of Hodgkin's disease.

References:


1. Mason DY, Cordell JL, Brown MH, Borst J, Jones M, Pulford K, et al. CD79a: a novel marker for B-cell neoplasms in routinely processed tissue samples. Blood 1995;86:1453-9.
2. Pilozzi E, Pulford K, Jones M, Muller-Hermelink HK, Falini B, Ralfkiaer E, et al. Co-expression of CD79a (JCB117) and CD3 by lymphoblastic lymphoma. J Pathol 1998;186:140-3.
3. Chu PG, Arber DA. CD79: a review. Appl Immunohistochem Mol Morphol 2001;9:97-106

*Plasmacytoma (FFPE) stained with FLEX Anti-CD79α Code GA621, on Dako Omnis.*

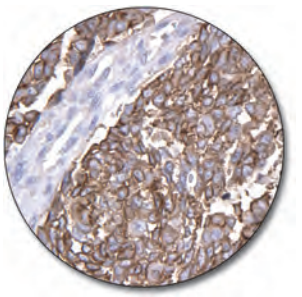
Monoclonal Mouse Anti-Human
**CD99, MIC2 Gene Products, Ewing's Sarcoma Marker**

Clone: 12E7
Isotype: IgG1, kappa

● Frozen ● Formalin

| | | |
|---|---|---|
| IVD | M3601 Culture supernatant | 1 mL |
| IVD | IR057 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS057 RTU★, FLEX | 30 tests, 6 mL△ |

The MIC2 gene products are also called p30/32mic2. They are expressed on the cell membrane of some lymphocytes (bone marrow, lymph nodes and spleen), cortical thymocytes, granulosa cells of the ovary, most Langerhans' islet cells, CNS ependymal cells, Sertoli's cells of the testis and, in a few cases, endothelial cells of single blood vessels. Results aid in the classification of Ewing's sarcoma and primitive peripheral neuroectoderm tumors.



*Ewing's sarcoma (FFPE) stained with FLEX Anti-CD99, Code IR057/IS057.*

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**CD105, Endoglin**

Clone: SN6h
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme

| | | | |
|---|---|---|---|
| IVD | M3527 | Culture supernatant | 1 mL |

Endoglin is a type I transmembrane protein which is highly expressed on human vascular endothelial cells. A large variety of tissues express endoglin.

Polyclonal Rabbit Anti-Human
**CD117, c-kit**

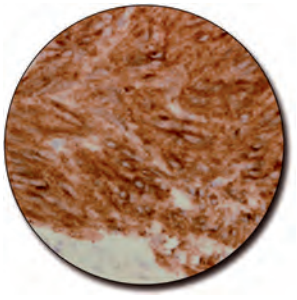
● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | A4502 | Affinity isolated | 0.2 mL |

The antibody labels the transmembrane tyrosine kinase receptor CD117/c-kit, located in hematopoietic stem cells, melanocytes, mast cells, Cajal cells, germ cells, basal cells of skin, and mammary ductal epithelia. Antibodies to CD117 may be useful for the classification of several cancers expressing c-kit, including gastrointestinal stromal tumors (GISTs), mast cell diseases, acute myeloid leukemia (AML), small cell lung carcinoma (SCLC), and Ewing's sarcoma (1-4).

References:


1. Tsuura Y, Hiraki H, Watanabe K, Igarashi S, Shimamura K, Fukuda T, et al. Preferential localization of c-kit product in tissue mast cells, basal cells of skin, epithelial cells of breast, small cell lung carcinoma and seminoma/dysgerminoma in human: immunohistochemical study on formalin-fixed, paraffin-embedded tissues. Virchows Arch 1994;424:135-41.
2. van Oosterom AT, Judson I, Verweij J, Stroobants S, di Paola ED, Dimitrijevic S, et al. Safety and efficacy of imatinib (STI571) in metastatic gastrointestinal stromal tumours: a phase I study. Lancet 2001;358:1421-3.
3. Hornick JL, Fletcher CDM. Immunohistochemical staining for KIT (CD117) in soft tissue sarcomas is very limited in distribution. Am J Clin Pathol 2002;117:188-93
4. Smithey BE, Pappo AS, Hill DA. C-kit expression in pediatric solid tumors: a comparative immunohistochemical study. Am J Surg Pathol 2002;26:486-92.

*Gastrointestinal tumor (FFPE) stained with Anti-CD117, c-kit.*

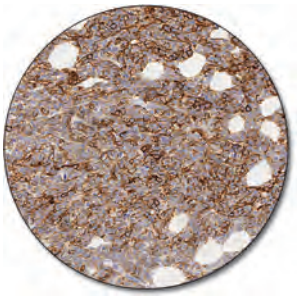
Monoclonal Mouse Anti-Human
**CD138**

Clone: MI15
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7228 | Culture supernatant | 1 mL |
| IVD | GA642 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR642 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS642 | RTU★, FLEX | 30 tests, 6 mL△ |

CD138, syndecan-1, is a transmembrane proteoglycan with a main cellular expression in stratified and simple epithelia. Within the hemopoietic system, CD138 is mainly confined to late stages of B-cell differentiation. CD138 expression is reduced during malignant transformation of various epithelia, and CD138 is rapidly shed by myeloma cells entering into apoptosis. This antibody is a useful aid for classification of multiple myeloma. Anti-CD138 may also be useful for the subclassification of diffuse large B-cell lymphomas.



*High grade myeloma (FFPE) stained with FLEX Anti-CD138, Code GA642, on Dako Omnis.*

**CD141**

See: Thrombomodulin

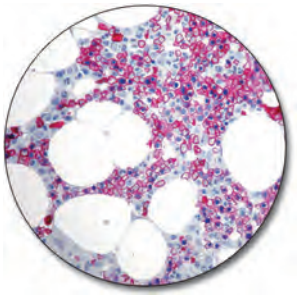
Monoclonal Mouse Anti-Human
**CD235a, Glycophorin A**

Clone: JC159
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0819 | Culture supernatant | 1 mL |

Reacts with normal erythroid cells at essentially all stages of differentiation from erythroblasts to mature erythrocytes. The antibody is a useful aid for classification of erythroleukemia.



*Bone marrow normal erythropoiesis (FFPE) stained with Anti-CD235a, Glycophorin A, Code M0819.*

**CD236R**

See: Glycophorin C



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**CD246, ALK Protein**

Clone: ALK1
Isotype: IgG3, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7195 | Culture supernatant | 0.2 mL/1 mL |
| IVD | GA641 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR641 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS641 | RTU★, FLEX | 30 tests, 6 mL△ |

Recognizes a formalin-resistant epitope in both the 80 kDa NPM-ALK chimeric and the 200 kDa normal human ALK proteins (1). Normal ALK protein expression is restricted to the central nervous system. The hybrid gene, *NPM-ALK*, created by the t(2;5)(p23;q35) chromosomal translocation encodes part of the nucleolar phosphoprotein, nucleophosmin (NPM), joined to the cytoplasmic portion of the anaplastic lymphoma kinase (ALK) receptor tyrosine kinase (2). This antibody is a useful aid for classification of anaplastic large cell lymphoma (ALCL).

References:


1. Pulford K, Lamant L, Morris SW, Butler LH, Wood KM, Stroud D, et al. Detection of anaplastic lymphoma kinase (ALK) and nucleolar protein nucleophosmin (NPM)-ALK proteins in normal and neoplastic cells with the monoclonal antibody ALK1. Blood 1997;89:1394-404.
2. Morris SW, Kirstein MN, Valentine MB, Dittmer KG, Shapiro DN, Saltman DL, et al. Fusion of a kinase gene, ALK, to a nucleolar protein gene, NPM, in non-Hodgkin's lymphoma (published erratum appears in Science 1995;267:316-7). Science 1994;263:1281-4.


*Anaplastic large cell lymphoma (FFPE) stained with FLEX Anti-CD246, ALK Protein, Code GA641, on Dako Omnis.*

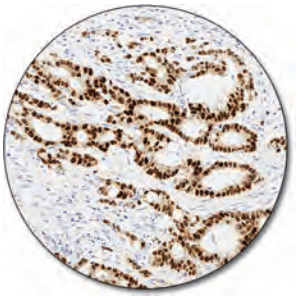
Monoclonal Mouse Anti-Human
**CDX2**

Clone: DAK-CDX2
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3636 | Culture supernatant | 0.2 mL/1 mL |
| IVD | GA080 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR080 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS080 | RTU★, FLEX | 30 tests, 6 mL△ |

*Cdx2,* a human gene homologous to the Drosophila caudal-type homeobox gene, encodes a transcription factor, which is involved in proliferation and differentiation of intestinal epithelial cells. The CDX2 protein is widely expressed in intestinal epithelium from the duodenum to the rectum. Scattered expression has been reported in pancreatic ductules, while no expression has been observed in other normal tissues tested. Results aid in the classification of both primary and metastatic tumors of the gastrointestinal tract, including carcinoids.



*Colon adenocarcinoma (FFPE) stained with FLEX Anti-CDX2, Code GA080, on Dako Omnis.*

Polyclonal Rabbit Anti-Human
**c-erbB-2 Oncoprotein**

| | | | |
|---|---|---|---|
| ASR | A0485 | Affinity isolated | 0.2 mL |

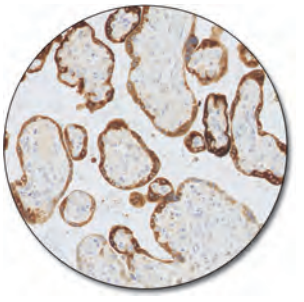
A synthetic peptide, coupled to keyhole limpet hemocyanin, has been used for immunization. The peptide represents part of the predicted 185 kDa oncoprotein encoded by ERBB2, also termed HER2 or NEU. The antibody recognizes an epitope on the cytoplasmic part of the cell membrane-bound c-erbB-2 oncoprotein.

Polyclonal Rabbit Anti-Human
**Chorionic Gonadotropin (hCG)**

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | A0231 | Ig fraction | 2 mL |
| IVD | GA508 | RTU★, FLEX **NEW** | 60 tests, 12 mL◆ |
| IVD | IR508 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS508 | RTU★, FLEX | 30 tests, 6 mL△ |

The isolated β-chain of hCG is used for immunization. The antibody cross-reacts with human luteinizing hormone (LH). For immunohistochemical use, the cross-reaction with LH will not cause misinterpretation, and the antibody is well-suited for identification of hCG in trophoblastic elements and is a useful aid for classification of germ cell tumors.



*Placenta (FFPE) stained with FLEX Anti-Human Chorionic Gonadotropin, Code GA508, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**Chromogranin A**

Clone: DAK-A3
Isotype: IgG2b, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0869 | Culture supernatant | 0.2 mL/1 mL |

Labels cells of neuroendocrine origin. Anti-Chromogranin A, clone DAK-A3, reacts with an epitope on the C-terminal half of the chromogranin A molecule. Results aid in the classification of neuroendocrine-derived tumors.

**c-kit**

See: CD117, c-kit

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**Collagen IV**

Clone: CIV 22
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0785 | Culture supernatant | 1 mL |

Is directed against collagen IV, a major constituent of the basement membrane. The antibody is important in demonstrating the loss of basement membrane. The antibody is a useful aid for classification of invasive carcinomas.

Monoclonal Mouse Anti-Human
**COX-2**

Clone: CX-294
Isotype: IgG2a, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3617 | Culture supernatant | 1 mL |

The cyclooxygenase (COX) enzymes are critical in the biosynthesis of prostaglandins from arachidonic acid. COX-2 is a 70 kDa enzyme that is responsible for prostaglandin synthesis at the site of inflammation and is readily induced in response to cell activation by cytokines, growth factors and tumor promoters. Results aid in the classification of a variety of malignancies, including colorectal adenocarcinoma, a subset of breast adenocarcinomas and adjacent ductal carcinoma in situ, lung adenocarcinoma, esophageal squamous cell carcinoma and squamous adenocarcinoma, malignant melanoma, and subsets of ovarian carcinoma and prostate carcinoma.

Monoclonal Rabbit Anti-Human
**Cyclin D1**

Clone: EP12

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3642 | Affinity isolated | 1 mL |
| IVD | GA083 | RTU★, FLEX **NEW** | 60 tests, 12 mL◆ |
| IVD | IR083 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS083 | RTU★, FLEX | 30 tests, 6 mL △ |

This monoclonal rabbit antibody reacts with cyclin D1, a 36 kDa protein encoded by the CCND1 (bcl-1) gene located on chromosome 11q13. Cyclin D1 is part of the cell cycle regulation and oncogenic transformation in mammalian cells. The cyclin-dependent kinases, CDK4 and CDK6, are associated with and activated by cyclin D1 thereby promoting G1 phase progression by retinoblastoma protein phosphorylating along with related proteins. Antibodies to cyclin D1 are a useful aid for classification of mantle cell lymphomas in the context of lymphoid tumors (1-2).

References:

1. Donnellan R, Chetty R. Cyclin D1 and human neoplasia. J Clin Pathol: Mol Pathol 1998;51:1-7.
2. Falini B, Martelli MP, Tiacci E, Ascani S, Thiede C, Pileri SA. Immunohistochemical surrogates for genetic alterations of CCND1, PML, ALK, and NPM1 genes in lymphomas and acute myeloid leukemia. Best Practice & Research Clin Haematol 2010:23:417-31.

*Mantle cell lymphoma (FFPE) stained with FLEX Anti-Cyclin D1, Code GA083, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**Cytokeratin**

Clone: AE1/AE3
Isotype: IgG1, kappa

● Frozen ● Formalin ● (Enzyme)/HIER

| | | | |
|---|---|---|---|
| IVD | M3515 | Ascites | 0.2 mL/1 mL |
| IVD | GA053 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR053 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS053 | RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with the 65-67, 64, 59, 58, 56.5, 56, 54, 52, 50, 48 and 40 kDa cytokeratins. The antibody labels keratinized and corneal epidermis, stratified squamous epithelia of internal organs, stratified epithelia, hyperproliferative keratinocytes, and simple epithelia. The antibody is useful aid for classification of tumors of epithelial origin as well as undifferentiated carcinomas.

*Adenocarcinoma (FFPE) stained with FLEX Anti-Cytokeratin, Code GA053, on Dako Omnis.*

**Dako FLEX RTU Antibodies for Undifferentiated Tumor Testing**

See our panel of FLEX antibodies at page 72

Monoclonal Mouse Anti-Human
**Cytokeratin**

Clone: MNF116
Isotype: IgG1, kappa

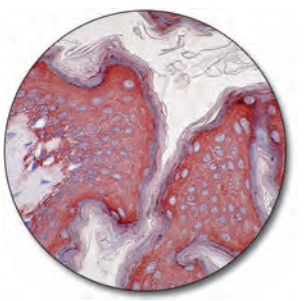
● Frozen ● Formalin ● Enzyme

| | | | |
|---|---|---|---|
| IVD | M0821 | Culture supernatant | 1 mL |

Reacts with cytokeratins 5, 6, 8, 17 and may also react with 19. The antibody shows an especially broad pattern of reactivity with human epithelial tissue from simple glandular to stratified squamous epithelium and can be used in the classification of neoplastic cells of epithelial origin.

References:

1. Prieto VG, Lugo J, McNutt NS. Intermediate- and low-molecular-weight keratin detection with the monoclonal antibody MNF116. An immunohistochemical study on 232 paraffin-embedded cutaneous lesions. J Cutan Pathol 1996;23:234-41.
2. Richter T, Nährig J, Komminoth P, Kowolik J, Werner M. Protocol for ultrarapid immunostaining of frozen sections. J Clin Pathol 1999;52:461-3.



*Skin (FFPE) stained with Anti-Cytokeratin, Code M0821.*



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

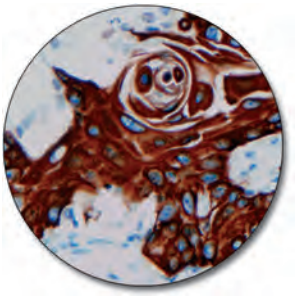
Monoclonal Mouse Anti-Human
**Cytokeratin 5/6**

Clone: D5/16 B4
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7237 Ascites Ig fraction | 0.2 mL/1 mL |
| IVD | GA780 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR780 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS780 RTU★, FLEX | 30 tests, 6 mL△ |

Reacts strongly with cytokeratins 5 and 6 and weakly with cytokeratin 4. The antibody does not cross-react with cytokeratins 1, 7, 8, 10, 13, 14, 18 and 19. It labels mesothelioma, and epithelial basal cells in prostate and tonsil. No reactivity with other mesodermally derived tissues, such as muscle and connective tissues, has been observed. The antibody is a useful aid for classification of epithelioid mesotheliomas.



*Squamous cell carcinoma of the lung (FFPE) stained with FLEX Anti-Cytokeratin 5/6, Code IR780/ IS780.*

Monoclonal Mouse Anti-Human
**Cytokeratin 7**

Clone: OV-TL 12/30
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme/HIER

| | | |
|---|---|---|
| IVD | M7018 Culture supernatant | 0.2 mL/1 mL |
| IVD | GA619 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR619 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS619 RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with the 54 kDa protein corresponding to cytokeratin 7. The antibody labels several types of normal and neoplastic epithelia, including many ductal and glandular epithelia. The antibody is a useful aid for classification of adenocarcinomas of the lung, breast and endometrium, thyroid gland and ovary, as well as chromophobe renal cell carcinomas. Results may also aid in the classification of prostate carcinomas where CK7 is rarely expressed.

Reference:

1. Chu P, Wu W, Weiss LM. Cytokeratin 7 and Cytokeratin 20 expression in epithelial neoplasms: a survey of 435 cases. Mod Pathol 2000;13:962-72.

*Ductal carcinoma (FFPE) stained with FLEX Anti-Cytokeratin 7, Code GA619, on Dako Omnis.*

Monoclonal Rabbit Anti-Human
**Cytokeratin 8/18**

Clone: EP17/EP30

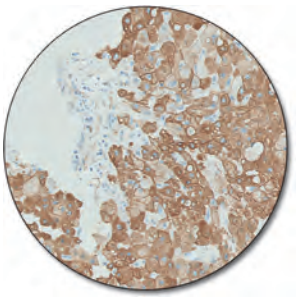
● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M3652 Culture supernatant | 1 mL |
| IVD | IR094 RTU★ | 60 tests, 12 mL▲ |

Cytokeratins 8 and 18 (CK8/18) make up one of the low molecular weight cytokeratins (LMW-CK). CK8/18 is expressed in simple, non-stratified epithelia, basal and superficial cells of transitional epithelium, the luminal/secretory cells of complex epithelia, mesothelium, and may be present in some types of mesenchymal cells. Multiple cytokeratins family members may be expressed in a given cell and are characteristic of the cell type and differentiation state. Nearly all carcinomas of epithelial origin and mesotheliomas express CK8/18, and CK8/18 expression patterns aid in the classification of tumors of unknown origin and poorly differentiated carcinomas. Antibodies to CK8/18 may be useful for classification of tumors of epithelial origin (1).
This product is a cocktail of two monoclonal rabbit antibodies.

Reference:

1. Moll R, Divo M, Langbein L. The human keratins: biology and pathology. Histochem Cell Biol 2008;129:705-33.



*Hepatocellular carcinoma (FFPE) stained with FLEX Anti-Cytokeratin 8/18, Code IR094.*

Monoclonal Mouse Anti-Human
**Cytokeratin 10**

Clone: DE-K10
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7002 Culture supernatant | 1 mL |

Reacts with the 56.5 kDa protein corresponding to cytokeratin 10. The antibody labels cytokeratin 10 present in keratinizing and non-keratinizing stratified epithelia and in the more differentiated areas of some squamous cell carcinomas.

Monoclonal Mouse Anti-Human
**Cytokeratin 10/13**

Clone: DE-K13
Isotype: IgG2a, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7003 Culture supernatant | 1 mL |

Reacts on formalin-fixed, paraffin-embedded tissue sections with the 53 kDa protein corresponding to cytokeratin 13. This cytokeratin is present in several non-cornified, stratified squamous epithelia, for example tongue mucosa, and tracheal and anal canal epithelium. On frozen sections the antibody, in addition, reacts with the 56.5 kDa protein corresponding to cytokeratin 10.



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-
**Cytokeratin 17**

Clone: E3
Isotype: IgG2b, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7046 | Culture supernatant | 1 mL |
| IVD | IR620 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS620 | RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with the 46 kDa human protein corresponding to cytokeratin 17. The antibody labels the basal layer of complex epithelia, i.e. the basal layer of pseudostratified epithelium in the larynx, trachea and bronchi. Results aid in the classification of squamous cell carcinomas of the lung, cervix and oral cavity.

Monoclonal Mouse Anti-Human
**Cytokeratin 18**

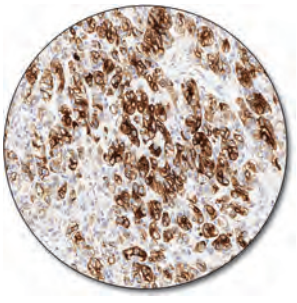
Clone: DC 10
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme/HIER

| | | | |
|---|---|---|---|
| IVD | M7010 | Culture supernatant | 0.2 mL |
| IVD | GA618 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR618 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS618 | RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with the 45 kDa protein corresponding to cytokeratin 18. The antibody labels a large number of simple epithelia, including many ductal and glandular epithelia. The antibody is a useful aid for classification of tumors of epithelial origin. In vascular tumors, the antibody may be a useful aid in the classification of epithelioid hemangioendotheliomas.

Reference:
1. Lauerova L, Kovarik J, Bartek J, Rejthar A, Vojtesek B. Novel monoclonal antibodies defining epitope of human cytokeratin 18 molecule. Hybridoma 1988;7:495-504.



*Renal clear cell carcinoma stained with FLEX Anti-Cytokeratin 18, Code GA618, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**Cytokeratin 19**

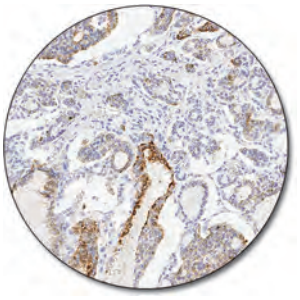
Clone: RCK108
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme/HIER

| | | | |
|---|---|---|---|
| IVD | M0888 | Culture supernatant | 1 mL |
| IVD | GA615 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR615 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS615 | RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with the 40 kDa protein corresponding to cytokeratin 19. The antibody labels many types of simple and non-keratinizing epithelia, including ductal and glandular epithelia. The antibody is a useful aid for classification of tumors of epithelial origin.

Reference:
1. Dalal P, Shousha S. Keratin 19 in paraffin sections of medullary carcinoma and other benign and malignant breast lesions. Mod Pathol 1995;8:413-6.



*Thyroid papillary carcinoma (FFPE) stained with FLEX Anti-Cytokeratin 19, Code GA615, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**Cytokeratin 20**

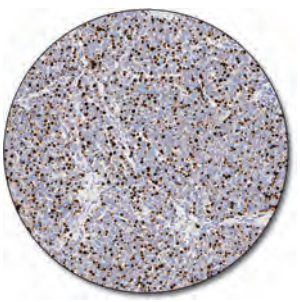
Clone: K 20.8
Isotype: IgG2a, kappa

● Formalin ● Enzyme/HIER

| | | | |
|---|---|---|---|
| IVD | M7019 | Purified | 0.2 mL/1 mL |
| IVD | GA777 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR777 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS777 | RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with the 46 kDa protein corresponding to cytokeratin 20. The antibody is a useful aid for classification of adenocarcinomas of the colon, mucinous ovarian tumors, transitional-cell and Merkel-cell carcinomas, adenocarcinomas of the stomach, bile system and pancreas. Results also aid in the classification of most squamous cell carcinomas and most adenocarcinomas from other sites (breast, endometrium, lung, prostate), non-mucinous tumors of the ovary, and small-cell lung carcinomas as these may be negative.

References:
1. Moll R, Löwe A, Laufer J, Franke WW. Cytokeratin 20 in human carcinomas. Am J Pathol 1992;140:427-47.
2. Harnden P, Mahmood N, Southgate J. Expression of cytokeratin 20 redefines urothelial papillomas of the bladder. Lancet 1999;353:974-7.
3. Chu P, Wu W, Weiss LM. Cytokeratin 7 and cytokeratin 20 expression in epithelial neoplasms: a survey of 435 cases. Mod Pathol 2000;13:962-72.



*Merkel cell carcinoma (FFPE) stained with FLEX Anti-Cytokeratin 20, Code GA777, on Dako Omnis.*



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**Cytokeratin, High Molecular Weight**

Clone: 34βE12
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme + HIER

| | | | |
|---|---|---|---|
| IVD | M0630 | Culture supernatant | 0.2 mL/1 mL |
| IVD | GA051 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR051 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS051 | RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with the 68 kDa, 58 kDa, 56.5 kDa and 50 kDa proteins corresponding to cytokeratins 1, 5, 10 and 14. The antibody labels squamous, ductal and complex epithelia. Results aid in the classification of prostatic adenocarcinoma and in the classification of neoplastic tissue as carcinoma of epithelial origin.

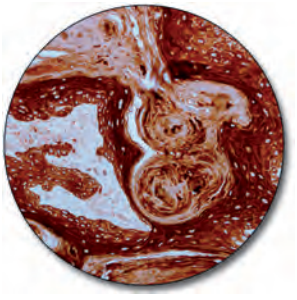
*Prostate (FFPE) stained with FLEX Anti-Cytokeratin HMW, Code GA051, on Dako Omnis.*

Polyclonal Rabbit Anti-
**Cytokeratin, Wide Spectrum Screening**

● Formalin ● Enzyme

| | | | |
|---|---|---|---|
| IVD | Z0622 | Ig fraction | 1 mL |

Cow keratin has been used as immunogen. This antibody is particularly well-suited for the staining of a broad spectrum of human keratins and is a useful aid for the classification of neoplasm of epithelial origin.



*Squamous cell carcinoma (FFPE) stained with Anti-Cytokeratin, Wide Spectrum Screening.*

Monoclonal Mouse Anti-
**Cytomegalovirus**

Clone: CCH2 + DDG9
Isotype: IgG2a, kappa + IgG1, kappa

| | | | |
|---|---|---|---|
| ASR | M0854 | Culture supernatant | 1 mL |

Reacts with CMV immediate early antigen and early antigen. The antibody shows no cross-reaction with other herpesviruses or with adenovirus.

**D2-40**

See: Podoplanin

**Dendritic Reticulum Cell**

See: CD35

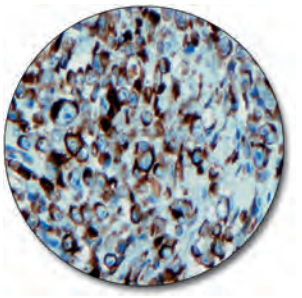
Monoclonal Mouse Anti-Human
**Desmin**

Clone: D33
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0760 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR606 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS606 | RTU★, FLEX | 30 tests, 6 mL△ |

Labels smooth and striated muscle cells. The antibody works on paraffin-embedded material without pretreament with proteolytic enzymes. Anti-Desmin, clone D33, is a useful aid for classification of tumors of uncertain origin.



*Rhabdomyosarcoma (FFPE) stained with FLEX Anti-Desmin, Code IR606/IS606.*

**Dako FLEX RTU Antibodies for Skeletal Muscle Testing**

See our panel of FLEX antibodies at page 70

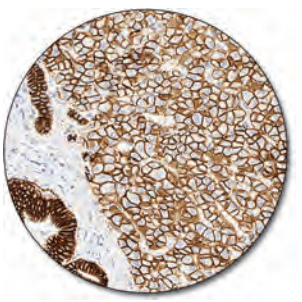
Monoclonal Mouse Anti-Human
**E-Cadherin**

Clone: NCH-38
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3612 | Culture supernatant | 0.2 mL/1 mL |
| IVD | GA059 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR059 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS059 | RTU★, FLEX | 30 tests, 6 mL△ |

E (epithelial)-cadherin is a 120 kDa transmembrane cell adhesion molecule. It has a significant function in intercellular adhesion of epithelial cells, the establishment of epithelial polarization, glandular differentiation and stratification. Down-regulation of E-cadherin expression has been observed in a number of carcinomas and is usually associated with advanced stage and progression. The antibody is a useful aid for classification of ductal breast carcinomas.



*Poorly differentiated ductal carcinoma (FFPE) stained with FLEX Anti-E-Cadherin, Code GA059, on Dako Omnis.*

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

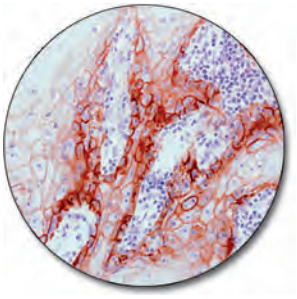
Monoclonal Mouse Anti-Human
**EGFR**

Clone: H11
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme

IVD M3563 Culture supernatant 1 mL

Labels the majority of simple and squamous epithelia. Results aid in the classification of neoplasms exhibiting EGFR expression, for example in a proportion of cases of breast, bladder, pancreatic, stomach and thyroid tumors.



*Squamous cell carcinoma (FFPE) stained with Anti-EGFR.*

Monoclonal Mouse Anti-Human
**EGFR, Wild-Type**

Clone: DAK-H1-WT
Isotype: IgG1

● Formalin ● HIER

RUO M7298 Culture supernatant 0.2 mL

Reacts with the N-terminal part of the extracellular domain of human epidermal growth factor receptor (EGFR). EGFR is a 170 kDa transmembrane receptor that is expressed by a variety of normal cells including fibroblasts and a wide range of epithelia. This antibody does not label the 2-7 truncated EGFR variant (EGFR-vIII).

Reference:
1. Jorissen RN, Walker F, Pouliot N, Garrett TP, Ward CW, Burgess AW. Epidermal growth factor receptor: mechanisms of activation and signaling [review]. Exp Cell Res 2003;284:31-53.

Monoclonal Mouse Anti-Human
**EGFR-pY1197**
**Phosphorylation Site Specific**

Clone: DAK-H1-1197
Isotype: IgG2a

● Formalin ● HIER

RUO M7299 Culture supernatant 0.2 mL

Reacts with epidermal growth factor receptor (EGFR) phosphorylated at tyrosine residue 1197 (pY1197). Binding of epidermal growth factor to the extracellular domain of EGFR results in receptor dimerization and autophosphorylation on tyrosine residues, pY1197 being one of the major autophosphorylation sites (1, 2).

References:
1. Chattopadhyay A, Vecchi M, Ji Q, Mernaugh R, Carpenter G. The role of individual SH2 domains in mediating association of phospholipase C-gamma1 with the activated EGF receptor. J Biol Chem 1999;274:26091-7.
2. Lombardo CR, Consler TG, Kassel DB. In vitro phosphorylation of the epidermal growth factor receptor autophosphorylation domain by c-src: identification of phosphorylation sites and c-src SH2 domain binding sites. Biochem 1995;34:16456-66.

**Endoglin**

See: CD105, Endoglin

**Endothelial Cell**

See: CD31, Endothelial Cell

Monoclonal Mouse Anti-
**Enterovirus**

Clone: 5-D8/1
Isotype: IgG2a, kappa

ASR M7064 Culture supernatant 1 mL

Reacts with an epitope on the VP1 peptide which is highly conserved within the enterovirus group. The antibody, originally generated using coxsackie virus B5 as immunogen, reacts with most of the enterovirus strains of the coxsackie, echo and poliovirus groups. No reaction is seen with human rotavirus, yellow fever virus, measles virus, rhinovirus A1 and adenovirus 18.

**Epidermal Growth Factor Receptor**

See: EGFR

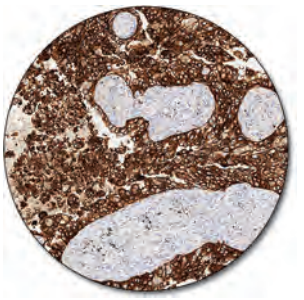
Monoclonal Mouse Anti-Human
**Epithelial Antigen**

Clone: Ber-EP4
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0804 | Culture supernatant | 0.2 mL/1 mL |
| IVD | GA637 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR637 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS637 | RTU★, FLEX | 30 tests, 6 mL△ |

Epithelial antigen is a transmembrane glycoprotein functioning as a cellular adhesion molecule. This epithelium-specific antigen is broadly distributed in epithelial cells, and displays a highly conserved expression in carcinomas. The antibody is a useful aid for classification of adenocarcinoma. Anti-Epithelial Antigen may also aid in classification of micrometastases in lymph nodes of esophageal carcinoma as well as in classification of basal and squamous cell carcinomas of the skin.



*Adenocarcinoma (FFPE) stained with FLEX Anti-Epithelial Antigen, Code GA637, on Dako Omnis.*

**Dako FLEX RTU Antibodies for Mesothelial Surface Testing**

See our panel of FLEX antibodies at page 68



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

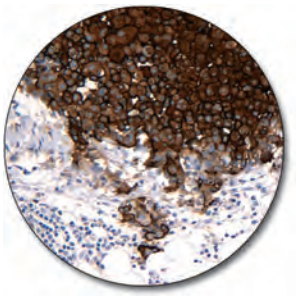
Monoclonal Mouse Anti-Human
**Epithelial Membrane Antigen (EMA)**

Clone: E29
Isotype: IgG2a, kappa

● Frozen ● Formalin ● Enzyme/HIER

| | | | |
|---|---|---|---|
| IVD | M0613 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR629 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS629 | RTU★, FLEX | 30 tests, 6 mL△ |

Epithelial membrane antigen (EMA) is present on the membrane of secretory epithelia. In the classification of hematolymphoid neoplasms, the antibody labels Reed-Sternberg cells in nodular lymphocyte predominant Hodgkin's lymphoma and neoplastic cells in a subset of anaplastic large cell lymphomas.



*Breast ductal carcinoma (FFPE) stained with FLEX Anti-EMA, Code IR629/IS629.*

Monoclonal Mouse Anti-Human
**Epithelial-Related Antigen**

Clone: MOC-31
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3525 | Culture supernatant | 1 mL |

Reacts with a transmembrane glycoprotein present on most epithelia. Mesothelial cell-derived tumors have been found to be negative. At the Second International Workshop on Small Cell Lung Cancer (SCLC) Antigens, the antibody was assigned to SCLC-Cluster 2, a group of antibodies which react with an epithelial antigen (1).

References:


1. Souhami RL, Beverley PC, Bobrow LG, Ledermann JA. Antigens of lung cancer: results of the Second International Workshop on Lung Cancer Antigens. J Natl Cancer Inst 1991;83:609-12.
2. Ruitenbeek T, Gouw AS, Poppema S. Immunocytology of body cavity fluids. MOC-31, a monoclonal antibody discriminating between mesothelial and epithelial cells. Arch Pathol Lab Med 1994;118:265-9.


Monoclonal Mouse Anti-
**Epstein-Barr Virus, LMP**

Clone: CS.1-4
Isotype: IgG1, kappa

| | | | |
|---|---|---|---|
| ASR | M0897 | Culture supernatant | 1 mL |

Labels the Epstein-Barr virus-encoded latent gene product, latent membrane protein (LMP).

Monoclonal Mouse Anti-Human
**ERCC1**

Clone: 4F9
Isotype: IgG1, kappa

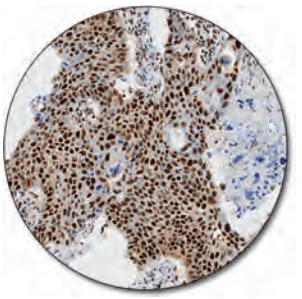
● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3648 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR091 | RTU★, FLEX | 60 tests, 12 mL▲ |

Excision repair cross-complementing rodent repair deficiency-1 (ERCC1) is a ~33 kDa nuclear protein involved in the nucleotide excision repair pathway (NER). The NER pathway is utilized to repair DNA mutations that occur as a result of DNA damage from external compounds, environmental carcinogens and UV-light.
Antibodies to ERCC1 is a useful aid for classification of a variety of tumor types including non-small cell lung carcinoma, gastroesophageal carcinoma, urothelial carcinoma, bladder carcinoma, and head and neck squamous cell carcinoma.

References:


1. Ma D, Baruch D, Shu Y, Yuan K, Sun Z, Ma K, et al. Using protein microarray technology to screen anti-ERCC1 monoclonal antibodies for specificity and applications in pathology. BMC Biotechnology 2012;12:88.
2. Olaussen KA, Dunant A, Fouret P, Brambilla E, André F, Haddad V, et al. DNA repair by ERCC1 in non-small-cell lung cancer and cisplatin-based adjuvant chemotherapy. N Engl J Med 2006;355:983-91.

*Lung carcinoma (FFPE) stained with FLEX Anti-ERCC1, Code IR091.*

Monoclonal Rabbit Anti-Human
**ERG (Ets-Related Gene)**

Clone: EP111

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7314 | Affinity isolated | 0.2 mL/1 mL |
| IVD | GA659 | RTU★, FLEX **NEW** | 60 tests, 12 mL◆ |
| IVD | IR659 | RTU★, FLEX | 60 tests, 12 mL▲ |

Ets-related gene (ERG) product is a ~41 kDa nuclear protein functioning as a DNA-binding transcriptional regulator that belongs to the erythroblast transformation-specific (ETS) family of transcription factors. In prostate cancer, ERG has most frequently been shown as a fusion protein with transmembrane protease, serine 2 (TMPRSS2), where a deletion between the *TMPRSS2* and *ERG* genes causes the *ERG* gene to come under the control of the androgen-responsive promoter elements of *TMPRSS2*.
This antibody is a useful aid for the classification of prostate adenocarcinoma (1, 2). Furthermore, ERG may also be a useful aid for classification of prostatic intraepithelial neoplasia (PIN) and vascular tumors.

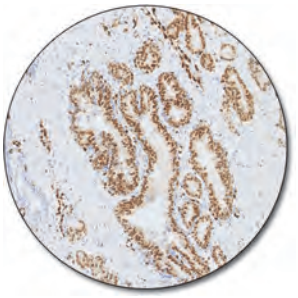
References:


1. Park K, Tomlins SA, Mudaliar KM, Chiu YL, Esgueva R, Mehra R, et al. Antibody-based detection of ERG rearrangement-positive prostate cancer. Neoplasia 2010;12:590-8.
2. van Leenders GJ, Boormans JL, Vissers CJ, Hoogland AM, Bressers AA, Furusato B, et al. Antibody EPR3864 is specific for ERG genomic fusions in prostate cancer: implications for pathological practice. Mod Pathol 2011;24:1128-38.






◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections



*Prostate carcinoma (FFPE) stained with FLEX Anti-ERG, Code GA659, on Dako Omnis.*

Monoclonal Rabbit Anti-Human
**Estrogen Receptor α**

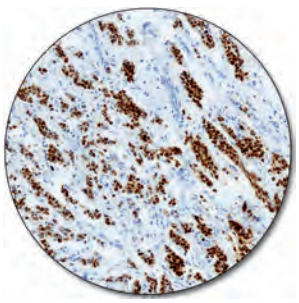
Clone: EP1

● Formalin ● HIER

IVD IR084 RTU★, FLEX 60 tests, 12 mL▲

This monoclonal rabbit antibody reacts with human estrogen receptor α (ER α). Estrogens have been found to be preferentially concentrated in the estrogen target organs of animals and in human breast cancers, and it is well documented that the mitogenic effects of estrogen are mediated by ER. Historical studies have shown that ER status is correlated with untreated outcome and with response to anti-hormonal therapy, e.g. tamoxifen (1). The antibody can used in the semi-quantitative detection of human estrogen receptor in tissue sections of human breast cancer by immunohistochemistry for assessment of estrogen receptor status.in human breast carcinomas.

Reference:
1. Elledge RM, Fuqua SAW. Chapter 31: Estrogen and Progesterone Receptors. In: Diseases of the Breast. Harris JR, et al. eds. Philadelphia: Lippincott Williams & Wilkins 2000:471-85.



*Breast carcinoma (FFPE) stained with FLEX Anti-Estrogen Receptor α, Clone EP1.*

**Dako FLEX RTU Antibodies for Breast Tissue Testing**

See our panel FLEX antibodies at page 64

Monoclonal Mouse Anti-Human
**Estrogen Receptor β1**

Clone: PPG5/10
Isotype: IgG2a

● Formalin ● HIER

IVD M7292 Culture supernatant• 1 mL

The antibody labels human wild type estrogen receptorβ (ERβ1) protein and is a useful tool for the characterization of the ERβ1 status in human breast (1, 2) and prostate carcinomas (3). Results from a number of studies suggest a loss of ERβ expression or a decreased expression in many cancers, including breast, ovary and colon, compared with the expression in the corresponding normal tissues, and alteration in the ERα/ERβ ratio is proposed to govern tumor development (4). In prostatic neoplasia, the expression of ERβ appears complex, thus ERβ, as detected with anti-ERERβ1, clone PPG5/10, has been reported to be partially lost in high-grade prostatic intraepithelial neoplasia (HGPIN) and in androgen-insensitive stages of prostatic adenocarcinoma, while it is retained in untreated primary and metastatic prostatic adenocarcinoma (3).

References:
1. Skliris GP, Parkes AT, Limer JL, Burdall SE, Carder PJ, Speirs V. Evaluation of seven oestrogen receptor β antibodies for immunohistochemistry, western blotting, and flow cytometry in human breast tissue. J Pathol 2002;197:155-62.
2. Saunders PTK, Millar MR, Williams K, Macpherson S, Bayne C, O'Sullivan C, et al. Expression of oestrogen receptor beta (ERβ1) protein in human breast cancer biopsies. Br J Cancer 2002;86:250-6.
3. Fixemer T, Remberger K, Bonkhoff H. Differential expression of the estrogen receptor beta (ERβ) in human prostate tissue, premalignant changes, and in primary, metastatic, and recurrent prostatic adenocarcinoma. Prostate 2003;54:79-87.
4. Bardin A, Boulle N, Lazennec G, Vignon F, Pujol P. Loss of EBβ expression as a common step in estrogen-dependent tumor progression (review). Endocr Relat Cancer 2004;11:537-51.

**Ewing's Sarcoma Marker, MIC2 Gene Product**

See: CD99, MIC2 Gene Product, Ewing's Sarcoma Marker

**Factor VIII-Related Antigen**

See: Von Willebrand Factor

Monoclonal Mouse Anti-Human
**Fascin**

Clone: 55K-2
Isotype: IgG1

● Frozen ● Formalin ● HIER

RUO M3567 Culture supernatant 1 mL

Fascin, encoded by the human homologue for the *sn* gene, *HSN*, has been localized to microspikes and stress-fibers of cultured cells, where it is thought to be involved in the formation of microfilament bundles. Fascin is expressed in the cytoplasm of Reed-Sternberg cells, as well as in certain dendritic cells.

Polyclonal Rabbit Anti-Human
**Fibrinogen**

● Frozen ● Formalin

IVD F0111 FITC. Ig fraction 2 mL

F0111 reacts with fibrinogen, fibrin and the fibrinogen fragments D and E.

Monoclonal Mouse Anti-Human
**Follicle-Stimulating Hormone (FSH)**

Clone: C10
Isotype: IgG1, kappa

● Formalin ● Enzyme

IVD M3504 Culture supernatant 1 mL

Reacts with the β-subunit of FSH. By double monoclonal EIA, no detectable cross-reactivity was found against LH, TSH, βhCG, prolactin, hGH and hCG. The antibody labels gonadotrophic cells of the pituitary. Results aid in the classification of pituitary adenomas.



• Product to be discontinued on 31 December 2016
▲ Packaged in vials for use with Autostainer Link instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**Follicular Dendritic Cell**

Clone: CNA.42
Isotype: IgM

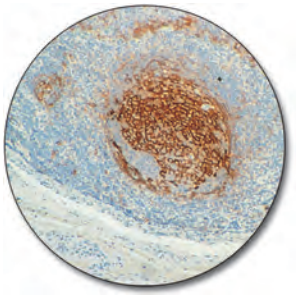
● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7157 Culture supernatant | 1 mL |

Recognizes a non-lineage restricted 120 kDa antigen expressed on follicular dendritic cells. This antibody is a useful aid for classification of nodular, lymphocyte-predominant Hodgkin's lymphoma, follicular dendritic reticulum cell sarcoma and EBV-positive inflammatory pseudotumors of FDC origin. This antibody is a good supplement for the demonstration of follicular dendritic cells (1, 2).

References:

1. Delsol G, Meggetto F, Brousset P, Cohen-Knafo E, Al Saati T, Rochaix P, et al. Relation of follicular dendritic reticulum cells to Reed-Sternberg cells of Hodgkin's disease with emphasis on the expression of CD21 antigen. Am J Pathol 1993;142:1729-38.
2. Raymond I, Al Saati T, Tkaczuk J, Chittal S, Delsol G. CNA.42, a new monoclonal antibody directed against a fixative-resistant antigen of follicular dendritic reticulum cells. Am J Pathol 1997;151:1577-85.



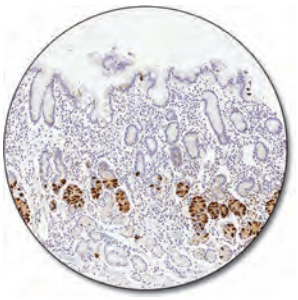
*Tonsil (FFPE) stained with Anti-Follicular Dendritic Cell, Code M7157.*

Polyclonal Rabbit Anti-Human
**Gastrin**

● Formalin

| | | | |
|---|---|---|---|
| IVD | A0568 | Ig fraction | 1 mL |
| IVD | GA519 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR519 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS519 | RTU★, FLEX | 30 tests, 6 mL△ |

Gastrin is a peptide hormone that is important in the regulation of gastric acid secretion and mucosal cell proliferation. This antibody labels cells producing gastrin or structural gastrin analogues.



*Gastrin-producing tumor (FFPE) stained with FLEX Anti-Gastrin, Code GA519, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**Glial Fibrillary Acidic Protein (GFAP)**

Clone: 6F2
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M0761 Culture supernatant | 1 mL |

Labels astrocytes and some CNS ependymal cells. The antibody is a useful aid for classification of tumors of uncertain origin.

Polyclonal Rabbit Anti-
**Glial Fibrillary Acidic Protein (GFAP)**

● Frozen ● Formalin ● Enzyme/(HIER)

| | | | |
|---|---|---|---|
| IVD | Z0334 | Ig fraction | 0.2 mL/1 mL |
| IVD | GA524 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR524 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS524 | RTU★, FLEX | 30 tests, 6 mL△ |

Glial fibrillary acidic protein (GFAP) is a 50 kDa intracytoplasmic filamentous protein that constitutes a portion of the cytoskeleton in astrocytes. With increasing astrocyte malignancy, there is a progressive loss of GFAP production. This antibody is a useful aid for the classification of astrocytoma and glioblastoma.

Reference:

1. Eng LF, Ghirnikar RS, Lee YL. Glial fibrillary acidic protein: GFAP-thirty-one years (1969-2000). Neurochem Res 2000;25:1439-51.

*Glioblastoma (FFPE) stained with FLEX Anti-GFAP, Code GA524, on Dako Omnis.*

**Glycophorin A**

See: CD235a, Glycophorin A

Monoclonal Mouse Anti-Human
**Glycophorin C**

Clone: Ret40f
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme/HIER

| | | |
|---|---|---|
| IVD | M0820 Culture supernatant | 1 mL |

Reacts with all red cells and their precursors. Results aid in the classification of neoplasms derived from the erythroid lineage.

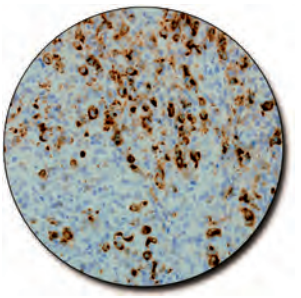
Monoclonal Mouse Anti-Human
**Granzyme B**

Clone: GrB-7
Isotype: IgG2a, kappa

● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7235 Purified | 1 mL |

Recognizes granzyme B, a 29 kDa serine protease with chymotrypsin-like substrate specificity. Cytotoxic T lymphocytes (CTL) and natural killer (NK) cells are the major acteurs in the elimination of neoplastic and virally infected cells. The antibody is a useful aid for classification of T/NK-cell lymphomas with cytotoxic phenotypes.



*NK-lymphoma (FFPE) stained with Anti-Granzyme B.*

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

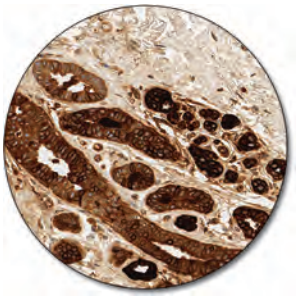
Monoclonal Mouse Anti-Human
**Gross Cystic Disease Fluid Protein-15**

Clone: 23A3
Isotype: IgG2a, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3638 | Culture supernatant | 1 mL |
| IVD | GA077 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR077 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS077 | RTU★, FLEX | 30 tests, 6 mL△ |

Gross cystic disease fluid protein-15 (GCDFP-15) is a 15 kDa monomeric secretory glycoprotein encoded by the *prolactin-inducible protein (PIP)* gene. GCDFP-15 is a marker of apocrine differentiation, and is expressed in breast cystic fluid as well as in apocrine, lacrimal, ceruminous, Moll's and eccrine glands. Antibodies to GCDFP-15 are a useful aid for classification of breast carcinoma and metastatic tumors of breast origin.



*Breast hyperplasia (FFPE) stained with FLEX Anti-GCDFP-15, Code GA077, on Dako Omnis.*

Polyclonal Rabbit Anti-Human
**Growth Hormone (hGH)**

● Frozen ● Formalin

| | | | |
|---|---|---|---|
| IVD | A0570 | Whole serum | 1 mL |

Reacts with growth hormone-producing cells in the pituitary and is a useful aid for classification of pituitary adenomas.

Polyclonal Rabbit Anti-
**Helicobacter Pylori**

| | | | |
|---|---|---|---|
| ASR | B0471 | Ig fraction | 0.2 mL/1 mL |

The antibody labels *H. pylori* on the surface and in the cytoplasm of epithelial cells in stomach biopsies.

Polyclonal Rabbit Anti-
**Hepatitis B Virus Core Antigen (HBcAg)**

| | | | |
|---|---|---|---|
| ASR | B0586 | Whole serum | 1 mL |

Labels nuclei and occasionally the cytoplasm of virus-infected liver cells.

Monoclonal Mouse Anti-Human
**Hepatocyte**

Clone: OCH1E5
Isotype: IgG1, kappa

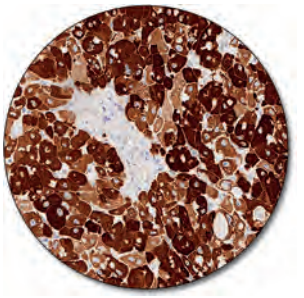
● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7158 | Culture supernatant | 1 mL |
| IVD | GA624 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR624 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS624 | RTU★, FLEX | 30 tests, 6 mL△ |

The antigen recognized by this antibody is present in normal human hepatocytes and is conserved in a majority of hepatocellular carcinomas (1).The antibody is a useful aid for classification of hepatocellular carcinomas. The antibody does not label other tumors, except for some rare tumors of gastrointestinal origin.

Reference:

1. Minervini MI, Demetris AJ, Lee RG, Carr BI, Madariaga J, Nalesnik MA. Utilization of hepatocyte-specific antibody in the immunocytochemical evaluation of liver tumors. Mod Pathol 1997;10:686-92.



*Hepatocellular carcinoma (FFPE) stained with FLEX Anti-Hepatocyte, GA624, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**HER3**

Clone: DAK-H3-IC
Isotype: IgG2a, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| RUO | M7297 | Culture supernatant | 0.2 mL |

Reacts with the intracellular domain of HER3. HER3 is 1 of 4 related members of the human epidermal growth factor receptor (HER) family. It is expressed in a wide variety of normal human tissues including the cells of the gastrointestinal, reproductive, respiratory and urinary tracts as well as the skin, endocrine and nervous system.

Polyclonal Rabbit Anti-
**Herpes Simplex Virus Type 1**

● Frozen ● Formalin

| | | | |
|---|---|---|---|
| IVD | B0114 | Ig fraction | 2 mL |

The antigen used for immunization has been prepared by sonication and extraction of herpes simplex virus type 1-infected rabbit cornea cells. In the antigen all the virus proteins are present. The antibody reacts with type-specific, i.e. HSV-1, as well as with type-common, i.e. also with HSV-2 antigens.

Polyclonal Rabbit Anti-
**Herpes Simplex Virus Type 2**

● Frozen ● Formalin

| | | | |
|---|---|---|---|
| IVD | B0116 | Ig fraction | 2 mL |

The antigen used for immunization has been prepared by sonication and extraction of herpes simplex virus type 2-infected rabbit cornea cells. In the antigen all the virus proteins are present. The antibody reacts with type-specific as well as with type-common antigens.

**HIV**

See: Human Immunodeficiency Virus (HIV), p24

Monoclonal Mouse Anti-Human
**HLA-ABC Antigen**

Clone: W6/32
Isotype: IgG2a, kappa

● Frozen

| | | | |
|---|---|---|---|
| IVD | M0736 | Culture supernatant | 1 mL |

Is directed against a monomorphic epitope on the 45 kDa polypeptide products of the *HLA-A, B* and *C* loci. These antigens belong to class I of the mammalian major histocompatibility complex (MHC), in humans known as human leucocyte-associated antigens (HLA). The antibody is not intended for use in tissue typing.

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**HLA-DP, DQ, DR Antigen**

Clone: CR3/43
Isotype: IgG1, kappa

● Frozen ● Formalin

| | | | |
|---|---|---|---|
| IVD | M0775 | Culture supernatant | 1 mL |

Reacts with the alpha and beta-chains of all products of the *DP*, *DQ* and *DR* subregions. These antigens belong to the histocompatibility (HLA) complex class II, or MHC class II. The antibody principally labels B cells, interdigitating reticulum cells, Langerhans' cells and many macrophages. In peripheral blood it labels B cells, most monocytes and activated T cells, but is unreactive with normal T cells and polymorphs. It is excellent on frozen as well as formalin-fixed, paraffin-embedded tissue sections. The antibody is not intended for use in tissue typing.

Monoclonal Mouse Anti-Human
**HLA-DR Antigen, Alpha-Chain**

Clone: TAL.1B5
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| RUO | M0746 | Culture supernatant | 1 mL |

Reacts with the alpha-chain of monomorphic HLA-class II DR antigen and is valuable for analysing variations in class II expression. The antibody is not intended for use in tissue typing.

Monoclonal Mouse Anti-
**Human Immunodeficiency Virus (HIV), p24**

Clone: Kal-1
Isotype: IgG1, kappa

| | | | |
|---|---|---|---|
| ASR | M0857 | Culture supernatant | 1 mL |

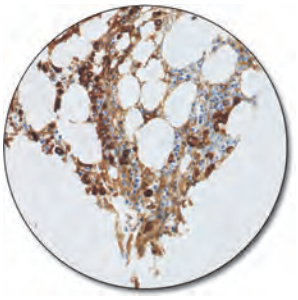
Reacts with the 24 kDa inner capsid protein of HIV.

Polyclonal Rabbit Anti-Human
**IgA, Specific for Alpha-Chains**

● Frozen ● Formalin ● Enzyme/HIER

| | | | |
|---|---|---|---|
| IVD | A0262 | Ig fraction | 1 mL |
| IVD | F0204 | FITC. Ig fraction | 2 mL |
| IVD | GA510 | RTU★, FLEX **NEW** | 60 tests, 12 mL◆ |
| IVD | IR510 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS510 | RTU★, FLEX | 30 tests, 6 mL△ |

The antigen used for immunization is serum IgA. The very high specificity has been ascertained in immunohistochemistry as well as in indirect ELISA and immunoblotting. Additionally, the specificity has been tested by crossed immunoelectrophoresis using 12.5 µL antibody per square cm gel area against 2 µL human plasma.
The $F(ab')_2$ fragment antibody is particularly useful for labeling unfixed blood cells containing active Fc receptors.



*Multiple myeloma (FFPE, bone marrow) stained with FLEX Anti-IgA, Code GA510, on Dako Omnis.*

Polyclonal Rabbit Anti-Human
**IgA, Specific for Alpha-Chains**

| | | | |
|---|---|---|---|
| ASR | F0316 | FITC. $F(ab')_2$ | 1 mL |

Polyclonal Rabbit Anti-Human
**IgA, IgG, IgM, Kappa, Lambda**

● Frozen ● Formalin ● Enzyme

| | | | |
|---|---|---|---|
| IVD | F0200 | FITC. Ig fraction | 2 mL |
| IVD | P0212 | HRP. Ig fraction | 2 mL |

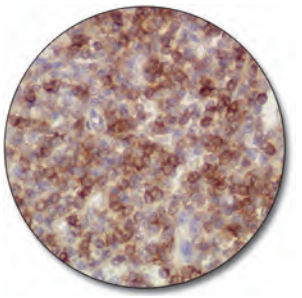
Very well-suited for the demonstration of human antibodies, no matter what the immunoglobulin class may be.

Polyclonal Rabbit Anti-Human
**IgD**

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | IR517 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS517 | RTU★, FLEX | 30 tests, 6 mL△ |

The antibody reacts with delta-chains of human IgD. The antibody is a useful aid for classification of splenic marginal zone lymphoma, mantle cell lymphoma, B-cell lymphocytic lymphoma, and rare subsets of multiple myeloma.



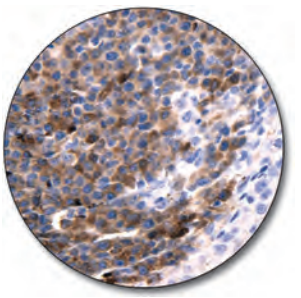
*Mantle cell lymphoma (FFPE) stained with FLEX Anti-IgD, Code IR517/IS517.*

Polyclonal Rabbit Anti-Human
**IgG, Specific for Gamma-Chains**

● Frozen ● Formalin ● Enzyme/HIER

| | | | |
|---|---|---|---|
| IVD | A0423 | Ig fraction | 1 mL |
| IVD | D0336 | AP. Affinity isolated | 1 mL |
| IVD | F0202 | FITC. Ig fraction | 2 mL |
| IVD | F0315 | FITC. $F(ab')_2$ | 1 mL |
| IVD | P0214 | HRP. Ig fraction | 2 mL |
| IVD | IR512 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS512 | RTU★, FLEX | 30 tests, 6 mL△ |

The very high specificity and good performance of the antibody have been ascertained in immunohistochemistry as well as in indirect ELISA and immunoblotting. Additionally, the specificity has been tested by crossed immunoelectrophoresis.
This antibody is useful for the identification of plasma cells and related lymphoid cells containing IgG, and it is a useful aid for classification of B-cell neoplasia.



*Plasmacytoma IgG subtype (FFPE) stained with FLEX Anti-IgG, Code IR512/IS512.*





◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Polyclonal Rabbit Anti-Human
**IgM, Specific for Mu-Chains**

● Frozen ● Formalin ● Enzyme/HIER

| | | | |
|---|---|---|---|
| IVD | A0425 | Ig fraction | 1 mL |
| IVD | F0203 | FITC. Ig fraction | 2 mL |
| IVD | P0215 | HRP. Ig fraction | 2 mL |
| IVD | IR513 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS513 | RTU★, FLEX | 30 tests, 6 mL△ |

The very high specificity has been ascertained in immunohistochemistry as well as in indirect ELISA and immunoblotting. Additionally, the specificity has been tested by crossed immunoelectrophoresis using 12.5 µL antibody per square cm gel area against 2 µL human plasma.
The $F(ab')_2$ fragment antibody is particularly useful for labeling unfixed blood cells containing active Fc receptors. This antibody is useful for the identification of plasma cells and related lymphoid cells containing IgM. It is a useful aid for classification of B-cell neoplasia.

Monoclonal Mouse Anti-Human
**IMP3**

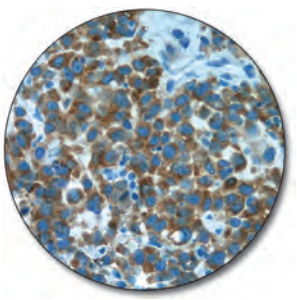
Clone: 69.1
Isotype: IgG2a, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3626 | Culture supernatant | 0.2 mL |

IMP3, insulin-like growth factor II mRNA binding protein 3, is a 580 amino acid oncofetal RNA binding protein containing four K homology domains. IMP3 is normally expressed in early embryonic tissues. Results aid in the classification of non-small cell lung carcinomas and pancreatic adenocarcinomas as well as subsets of carcinomas from other organs such as bladder, cervix, colon, esophagus and stomach.
References:

1. Wang T, Fan L, Watanabe Y, McNeill PD, Moulton GG, Bangur C, et al. L523S, an RNA-binding protein as a potential therapeutic target for lung cancer. Br J Cancer 2003;88:887-94.
2. Istvanic S, Fanger GR, Fraire AE, Khan A, Li C, Yantiss, RK. Spectrum of KOC (K homology domain containing protein over-expressed in cancer) immunostaining among carcinomas of different sites. Mod Pathol 2005;18:298A-9A.



*Mesothelioma (FFPE) stained with Anti-IMP3, Code M3626.*

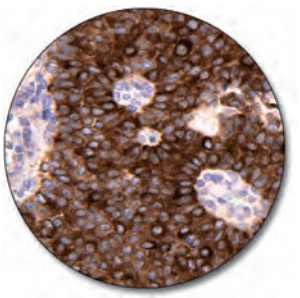
Monoclonal Mouse Anti-Human
**Inhibin α**

Clone: R1
Isotype: IgG2a, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3609 | Culture supernatant | 1 mL |
| IVD | IR058 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS058 | RTU★, FLEX | 30 tests, 6 mL△ |

Inhibin is a dimeric glycoprotein hormone comprised of an α and a β subunit. It is produced by ovarian granulosa cells and inhibits the production or secretion of pituitary gonadotropins, particularly follicle-stimulating hormone. The antibody was raised against the terminal 1-32 amino acid sequence of the inhibin α subunit. The antibody is a useful aid for classification of sex-cord-stromal tumors.



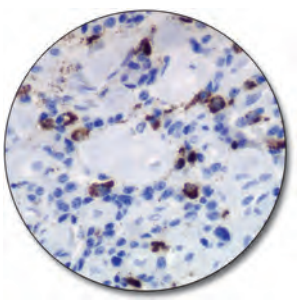
*Granulosa cell tumor (FFPE) stained with FLEX Anti-Inhibin α, Code IR058/IS058.*

Polyclonal Guinea Pig Anti-
**Insulin**

● Formalin

| | | | |
|---|---|---|---|
| IVD | A0564 | Ammonium sulphate fraction | 1 mL |
| IVD | IR002 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS002 | RTU★, FLEX | 30 tests, 6 mL△ |

Insulin is one of seven known polypeptide hormones produced in the pancreas. Insulin, secreted by B cells of the islets of Langerhans, participates in glucose utilization, protein synthesis and in the formation and storage of neutral lipids. This antibody labels insulin and results aid in the classification of insulin-producing cells in normal and neoplastic tissue.



*Insulinoma (FFPE) stained with FLEX Anti-Insulin, Code IR002/IS002.*



♦ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Polyclonal Rabbit Anti-Human
**Kappa Light Chains**

● Frozen ● Formalin ● Enzyme/HIER

| | | | |
|---|---|---|---|
| IVD | A0191 | Ig fraction | 2 mL |
| IVD | F0198 | FITC. Ig fraction | 2 mL |
| IVD | GA506 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR506 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS506 | RTU★, FLEX | 30 tests, 6 mL△ |

These reagents have been produced in a manner that ensures a particularly wide specificity for kappa-chains. The specificity is directed against surface as well as hidden determinants and has been ascertained by gel precipitation techniques and immunohistochemistry. This antibody is useful for the identification of plasma cells and related lymphoid cells containing kappa light chains, and it is a useful aid for classification of monoclonal gammopathies.

*Tonsil (FFPE) stained with FLEX Anti-Kappa Light Chains, Code GA506, on Dako Omnis.*

**Keratin**

See: Cytokeratin

**Ki-1 Antigen**

See: CD30

Monoclonal Mouse Anti-Human
**Ki-67 Antigen**

Clone: MIB-1
Isotype: IgG1, kappa

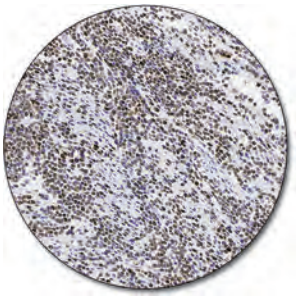
● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7240 | Culture supernatant | 0.2 mL/1 mL |
| IVD | GA626 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR626 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS626 | RTU★, FLEX | 30 tests, 6 mL△ |

With more than 4000 literature citations, the MIB-1 antibody has now been established as an important monoclonal mouse antibody for the demonstration of the Ki-67 antigen in formalin-fixed, paraffin-embedded specimens. The Ki-67 antigen is a large nuclear protein (345, 395 kDa) preferentially expressed during all active phases of the cell cycle ($G_1$, S, $G_2$ and M-phases), but absent in resting cells ($G_0$-phase). The antibody is a useful aid for classification of a variety of tumors.

References:

1. Gerdes J, Becker MH, Key G, Cattoretti G. Immunohistological detection of tumour growth fraction (Ki-67 antigen) in formalin-fixed and routinely processed tissues. J Pathol 1992;168:85-6.
2. Cattoretti G, Becker MH, Key G, Duchrow M, Schlüter C, Galle J, et al. Monoclonal antibodies against recombinant parts of the Ki-67 antigen (MIB 1 and MIB 3) detect proliferating cells in microwave-processed formalin-fixed paraffin sections. J Pathol 1992;168:357-63.
3. Scholzen T, Gerdes J. The Ki-67 protein: from the known and the unknown [review]. J Cell Physiol 2000;182:311-22.



*High grade lymphoma (FFPE) stained with FLEX Anti-Ki-67, Code GA626, on Dako Omnis.*

Monoclonal Mouse Anti-Rat
**Ki-67 Antigen**

Clone: MIB-5
Isotype: IgG1

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| RUO | M7248 | Culture supernatant | 1 mL |

The MIB-5 antibody is the antibody of choice for demonstration of the Ki-67 antigen in formalin-fixed, paraffin-embedded **rat specimens**. The antibody also labels mouse Ki-67 antigen. The Ki-67 antigen is a large nuclear protein (345, 395 kDa) preferentially expressed during all active phases of the cell cycle ($G_1$, S, $G_2$ and M phases), but absent in resting ($G_0$) cells.

**L523S Protein**

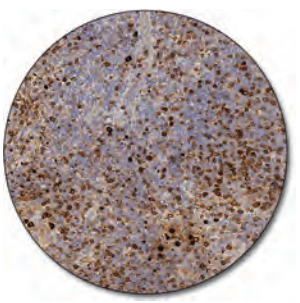
See: IMP3

Polyclonal Rabbit Anti-Human
**Lambda Light Chains**

● Frozen ● Formalin ● Enzyme/HIER

| | | | |
|---|---|---|---|
| IVD | A0193 | Ig fraction | 2 mL |
| IVD | F0199 | FITC. Ig fraction | 2 mL |
| IVD | GA507 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR507 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS507 | RTU★, FLEX | 30 tests, 6 mL△ |

The antigen used for immunization is a pool of human lambda Bence Jones proteins. Therefore, a reagent with a particularly wide specificity for lambda-chains is obtained. The specificity is directed against surface as well as hidden determinants and has been ascertained by gel precipitation techniques and immunohistochemistry. The antibody labels plasma cells and related lymphoid cells containing lambda light chains, and it is a useful aid for classification of monoclonal gammopathies.



*Tonsil (FFPE) stained with FLEX Anti-Lambda Light Chains, Code GA507, on Dako Omnis.*

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**Laminin**

Clone: 4C7
Isotype: IgG2a, kappa

● Frozen ● Formalin ● Enzyme

IVD M0638 Ascites 1 mL

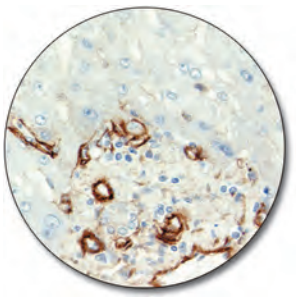
Reacts with a 380 kDa laminin alpha5-chain. Fibroblasts, epithelial, endothelial and smooth muscle cells secrete laminin. In normal tissues, laminin is invariably present in all basal membranes surrounding muscle, nerve, fat and decidua cells and separating epithelial and endothelial cells from connective tissues.

Polyclonal Rabbit Anti-
**Laminin**

● Frozen ● Formalin ● Enzyme

IVD Z0097 Ig fraction 1 mL

Laminin, isolated from a rat yolk sac tumor cell line, has been used for immunization. The antibody reacts strongly with human laminin, and labels basement membranes surrounding normal vessels, glands, muscles, nerves, fat and decidua cells, separating these from abutting connective tissues. Loss of basement membrane integrity may be observed in neoplastic invasion and around metastatic lesions.



*Liver (FFPE) stained with Anti-Laminin, Code Z0097.*

Monoclonal Mouse Anti-Human
**Laminin-5, Gamma-2 Chain**

Clone: 4G1
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

IVD M7262 Culture supernatant 1 mL

The expression of laminin-5 is restricted to epithelial tissues, where the protein is part of the epithelial anchoring systems and cell locomotion. Of the 15 laminins presently known, only laminin-5 contains the γ2 chain. This antibody is specific for the γ2 chain. Results aid in the classification of invading epithelial cancer cells in various types of squamous cell carcinomas, colon adenocarcinomas and lung adenocarcinomas.

References:

1. Skyldberg B, Salo S, Eriksson E, Aspenblad U, Moberger B, Tryggvason K, et al. Laminin-5 as a marker of invasiveness in cervical lesions. J Natl Cancer Inst 1999;91:1882-7.
2. Määttä M, Soini Y, Pääkkö P, Salo S, Tryggvason K, Autio-Harmainen H. Expression of the laminin γ2 chain in different histological types of lung carcinoma. A study by immunohistochemistry and in situ hybridisation. J Pathol 1999;188:361-8.

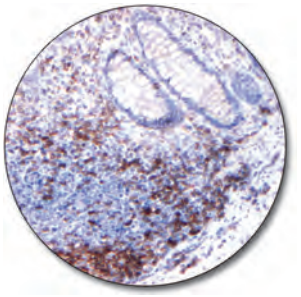
Monoclonal Mouse Anti-Human
**LAT Protein**

Clone: LAT-1
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

IVD M7279 Culture supernatant 0.2 mL

LAT (linker for activation of T cells) protein appears early in the T-cell development, at the thymocyte stage, and before expression of terminal deoxynucleotidyl transferase (TdT) in embryos. It is expressed by natural killer cells and T cells without restriction to any T-cell subpopulation. Megakaryocytes and mast cells also express LAT protein, whereas other myeloid cells, monocytic derived cells and B cells do not express LAT protein.



*Colon carcinoma (FFPE) stained with Anti-LAT Protein, Code M7279.*

**Leucocyte Common Antigen**

See: CD45, Leucocyte Common Antigen

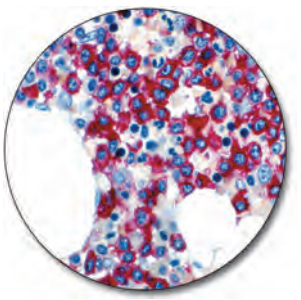
Monoclonal Mouse Anti-Human
**Leukaemia, Hairy Cell**

Clone: DBA.44
Isotype: IgM, kappa

● Frozen ● Formalin ● (Enzyme)/HIER

IVD M0880 Culture supernatant 1 mL

Results aid in the classification of hairy cell leukemia.



*Bone marrow interstitial infiltration (FFPE) stained with Anti-Hairy Cell Leukaemia, Code M0880.*

Monoclonal Mouse Anti-Human
**Luteinizing Hormone (LH)**

Clone: C93
Isotype: IgG1, kappa

● Formalin

IVD M3502 Culture supernatant 1 mL

Reacts with the β-chain of luteinizing hormone. By radioimmunoassay, this antibody was determined to be 100% reactive with hLH, 1.5% with hCG, 0.44% with hFSH and less than 1.0% with hTSH. The antibody labels gonadotrophic cells of the pituitary. Results aid in the classification of pituitary adenomas.

Polyclonal Rabbit Anti-Human
**Lysozyme EC 3.2.1.17 (Muramidase)**

● Formalin ● Enzyme

IVD A0099 Ig fraction 2 mL

A0099 has been used for classification of histiocytic neoplasias and myeloid leukemias (1, 2). Lysozyme isolated from urine of patients with monocytic leukemia has been used for immunization.

References:

1. Meister P, Huhn D, Nathrath W. Malignant histiocytosis. Immunohistochemical characterization on paraffin-embedded tissue. Virchows Arch A Path Anat Histol 1980;385:233-46.
2. Krugliak L, Meyer PR, Taylor CR. The distribution of lysozyme, alpha-1-antitrypsin, and alpha-1-antichymotrypsin in normal hematopoietic cells and in myeloid leukaemias. Am J Hematol 1986;21:99-109.

Monoclonal Mouse Anti-Rabbit
**Macrophage**

Clone: RAM11
Isotype: IgG1, kappa

● Frozen ● Formalin

| | | | |
|---|---|---|---|
| RUO | M0633 | Culture supernatant | 1 mL |

Labels rabbit macrophages and may be used in studies of the cellular components of atherosclerotic lesions in rabbits.

Monoclonal Mouse Anti-Human
**Mammaglobin**

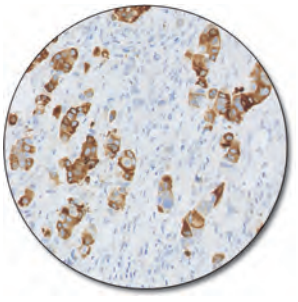
Clone: 304-1A5
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3625 | Culture supernatant | 0.2 mL |
| IVD | GA074 | RTU★, FLEX **NEW** | 60 tests, 12 mL◆ |
| IVD | IR074 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS074 | RTU★, FLEX | 30 tests, 6 mL△ |

Mammaglobin, a 93-amino acid glycoprotein, is encoded by a gene first identified in a study directed at the isolation of novel human breast cancer-associated genes (1). Mammaglobin expression is mostly, although not exclusively, confined to breast tissue, and anti-mammoglobin is a useful aid for the classification of carcinomas of breast origin.

Reference:
1. Watson MA, Dintzis S, Darrow CM, Voss LE, DiPersio J, Jensen R, et al. Mammaglobin expression in primary, metastatic, and occult breast cancer. Cancer Res 1999;59:3028-31.



*Invasive ductal carcinoma (FFPE) stained with FLEX Anti-Mammaglobin, Code GA074, on Dako Omnis.*

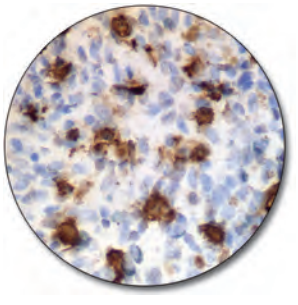
Monoclonal Mouse Anti-Human
**Mast Cell Tryptase**

Clone: AA1
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7052 | Culture supernatant | 0.2 mL |
| IVD | IR640 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS640 | RTU★, FLEX | 30 tests, 6 mL△ |

Human mast cell tryptases comprise a family of trypsin-like neutral serine proteases that are predominantly expressed in mast cells. These cells play an active role in such diverse diseases as atherosclerosis, asthma, arthritis, bile duct fibrosis, malignancy and pulmonary fibrosis. This antibody is a useful aid for classification of mast cell leukemia.



*Mastocytosis in the subcutis (FFPE) stained with FLEX Anti-Mast Cell Tryptase, Code IR640/IS640.*

Monoclonal Mouse Anti-Human
**MCM3 Protein**

Clone: 101
Isotype: IgG1, kappa

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7263 | Culture supernatant | 0.2 mL |

MCM3 protein is expressed in proliferating cells but disappears more slowly after initiation of cell differentiation than the Ki-67 antigen. This observation, correlated with the fact that MCM3 protein is not expressed when a marker of terminal differentiation, such as p27, is expressed, indicates that antibodies against MCM3 protein also label cells that have ceased to proliferate, but are not terminally differentiated (1).

Reference:
1. Endl E, Kausch I, Baack M, Knippers R, Gerdes J, Scholzen T. The expression of Ki-67, MCM3, and p27 defines distinct subsets of proliferating, resting, and differentiated cells. J Pathol 2001;195:457-62.

Monoclonal Mouse Anti-Human
**Melan-A**

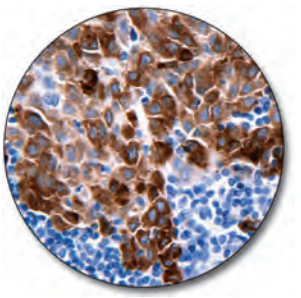
Clone: A103
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7196 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR633 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS633 | RTU★, FLEX | 30 tests, 6 mL△ |

Melan-A, isolated as a melanoma-specific antigen, is a transmembrane protein, which is expressed in skin, retina and the majority of cultured melanocytes as well as in melanomas and angiomyolipomas. The antibody is a useful aid for classification of melanomas and adrenocortical carcinomas. The antibody is also a useful aid for classification of angiomyolipomas.

References:
1. Fetsch PA, Cormier J, Hijazi YM. Immunocytochemical detection of MART-1 in fresh and paraffin-embedded malignant melanomas. J Immunother 1997;20:60-4.
2. Kawakami Y, Eliyahu S, Delgado CH, Robbins PF, Sakaguchi K, Apella E, et al. Identification of a human melanoma antigen recognized by tumor-infiltrating lymphocytes associated with in vivo tumor rejection. Proc Natl Acad Sci USA 1994;91:6458-62.



*Melanoma (FFPE) stained with FLEX Anti-Melan-A, Code IR633/IS633.*

**Dako FLEX RTU Antibodies for Skin Testing**

See our panel of FLEX antibodies at page 71

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

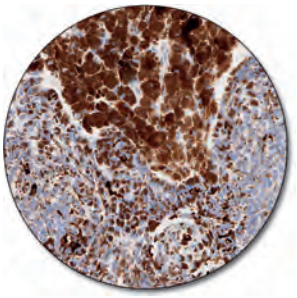
Monoclonal Mouse Anti-Human
**Melanosome**

Clone: HMB-45
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme/HIER

| | | |
|---|---|---|
| IVD | M0634 Culture supernatant | 0.2 mL/1 mL |
| IVD | GA052 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR052 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS052 RTU★, FLEX | 30 tests, 6 mL△ |

Labels an intracytoplasmic antigen in the majority of melanocytes with immature melanosome formation in normal skin and nevus. The antibody also reacts with junctional and blue nevus cells. Results aid in the classification of melanomas and melanocytic lesions.



*Melanoma (FFPE) stained with FLEX Anti-Melanosome, Code GA052, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**Mesothelial Cell**

Clone: HBME-1
Isotype: IgM

● Frozen ● Formalin

| | | |
|---|---|---|
| IVD | M3505 Culture supernatant | 1 mL |

Reacts with an antigen present in the membrane of mesothelial cells. No reactivity has been observed on kidney, liver, placenta, skin and thyroid. The antibody is a useful aid for classification of epithelial mesotheliomas and adenocarcinomas of various origin.

Reference:
1. Miettinen M, Kovatich AJ. HMBE-1 a monoclonal antibody useful in the differential diagnosis of mesothelioma, adenocarcinoma, and soft-tissue and bone tumors. Appl Immunohistochem 1995;3:115-22.

Monoclonal Mouse Anti-
**Metallothionein**

Clone: E9
Isotype: IgG1, kappa

● Frozen ● Formalin

| | | |
|---|---|---|
| IVD | M0639 Ascites | 1 mL |

Reacts with a conserved epitope shared by human metallothionein isoforms 1 and 2. Metallothioneins are low molecular weight, heavy metal-binding proteins. The expression of metallothioneins is induced by heavy metals, but also by other factors such as stress, glucocorticoids and lymphokines.

**MIB-1**

See: Ki-67 Antigen

**MIC2 Gene Products, Ewing's Sarcoma Marker**

See: CD99, MIC2 Gene Products, Ewing's Sarcoma Marker

Monoclonal Mouse Anti-Human
**MITF**

Clone: D5
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M3621 Culture supernatant | 0.2 mL |

MITF (microphthalmia transcription factor) is a basic helix-loop-helix-leucine-zipper (bHLH-Zip) transcription factor that regulates the development and survival of melanocytes and retinal pigment epithelium, and also is involved in transcription of pigmentation enzyme genes such as tyrosinase TRP1 and TRP2. MITF has been shown to be phosphorylated by MAP kinase in response to c-kit activation, resulting in upregulation of MITF transcriptional activity. Multiple isoforms of MITF exist, including MITF-A, MITF-B, MITF-C, MITF-H, and MITF-M, which differ in the amino-terminal domain and in their expression patterns. The MITF-M isoform is restricted to the melanocyte cell lineage. Anti-MITF, D5, recognizes a nuclear protein and is a useful aid for classification of primary and metastatic epithelioid malignant melanomas.

**Mouse Ki-67 Antigen**

See: Ki-67 Antigen

Monoclonal Mouse Anti-Human
**MUC2**

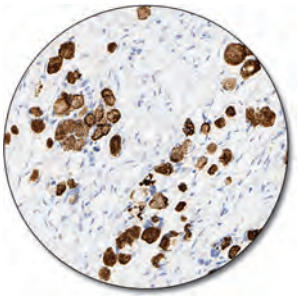
Clone: CCP58
Isotype: IgG1, kappa

● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7313 Culture supernatant | 0.2 mL/1 mL |
| IVD | IR658 RTU★, FLEX | 60 tests, 12 mL▲ |

Mucin 2 glycoprotein (MUC2) is a 520 kDa glycoprotein belonging to the superfamily of mucins. Mucins are high molecular weight glycoproteins produced by epithelial cells and can be divided into two families; secretory mucins and membrane bound mucins. MUC2 is a mucus-forming secreted mucin found in the cytoplasm of goblet cells in small intestine, colon, bronchus and salivary glands. MUC2 expression has been noted in primary gastrointestinal tract tumors of colonic, gastric and esophageal origin (1). MUC2 expression has also been found in goblet cells in colorectal carcinoma metastatic to the ovary, but not in primary mucinous ovarian adenocarcinoma. This antibody is a useful aid for classification of mucinous adenocarcinoma of gastrointestinal origin (1, 2) and intestinal metaplasia in Barrett's esophagus. Anti-MUC2 may also be a useful aid for classification of colon adenocarcinoma metastatic to the ovary.

References:
1. Lau SK, Weiss LM, Chu PG. Differential expression of MUC1, MUC2 and MUC5AC in carcinomas of various sites. Am J Clin Pathol 2004;122:61-9.
2. Lee HS, Lee HK, Kim HS, Yang HK, Kim YI, Kim WH. MUC1, MUC2, MUC5AC, and MUC6 expression in gastric carcinomas. Cancer 2001;92:1427-34.



*Colon adenocarcinoma (FFPE) metastatic to the ovary stained with FLEX Anti-MUC2, Code IR658.*

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

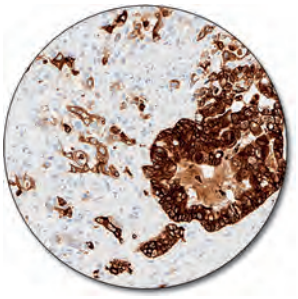
Monoclonal Mouse Anti-Human
**MUC5AC**

Clone: CLH2
Isotype: IgG1, kappa

● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7316 Culture supernatant | 0.2 mL/1 mL |
| IVD | IR661 RTU★, FLEX | 60 tests, 12 mL▲ |

Mucin 5AC glycoprotein (MUC5AC) is a 641 kDa glycoprotein belonging to the superfamily of mucins. Mucins are high molecular weight glycoproteins produced by epithelial cells and can be divided into two families; secretory mucins and membrane bound mucins. MUC5AC is a mucus-forming secreted mucin that is found in normal gastric and tracheo-bronchial mucosa, but absent from normal colon. MUC5AC expression is present in primary ovarian mucinous cancer but usually absent in colorectal adenocarcinoma, thus showing an expression pattern opposite to MUC2.
Anti-MUC5AC is a useful aid for classification of primary mucinous ovarian tumors. MUC5AC antibodies are also a useful aid for classification of intestinal metaplasia as well as in the classification of pancreatic carcinoma.



*Mucinous ovarian carcinoma (FFPE) stained with FLEX Anti-MUC5AC, Code IR661.*

Monoclonal Mouse Anti-Human
**MUM1 Protein**

Clone: MUM1p
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7259 Culture supernatant | 0.2 mL/1 mL |
| IVD | GA644 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR644 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS644 RTU★, FLEX | 30 tests, 6 mL△ |

Labels MUM1 protein in a subset of light zone germinal centre (GC) B cells (probably centrocytes and their progeny), plasma cells and activated T cells. Antibodies to MUM1 protein are a useful aid for classification of a wide spectrum of hematolymphoid neoplasms derived from these cells. Of non-hematolymphoid neoplasms only a proportion of melanomas are labeled (1, 2). Antibodies to MUM1 protein are a useful aid for subclassification of B-cell lymphomas (1-3).
References:


1. Falini B, Fizzotti M, Pucciarini A, Bigerna B, Marafioti T, Gambacorta M, et al. A monoclonal antibody (MUM1p) detects expression of the MUM1/IRF4 protein in a subset of germinal center B cells, plasma cells, and activated T cells. Blood 2000;95;2084-92.
2. Natkunam Y, Warnke RA, Montgomery K, Falini B, van de Rijn M. Analysis of MUM1/IRF4 protein expression using tissue microarrays and immunohistochemistry. Mod Pathol 2001;14:686-94.
3. Gaidano G, Carbone A. MUM1: a step toward the understanding of lymphoma histogenesis. Leukemia 2000;14:563-6.


*Diffuse large B-cell lymphoma (FFPE) stained with FLEX Anti-MUM1, Code GA644, on Dako Omnis.*

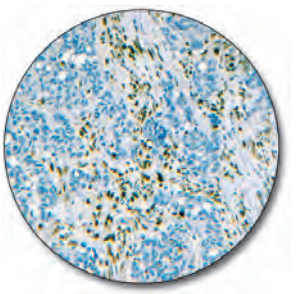
Monoclonal Mouse Anti-Human
**MutL Protein Homolog 1**

Clone: ES05
Isotype: IgG1

● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M3640 Culture supernatant | 0.2 mL/1 mL |
| IVD | IR079 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS079 RTU★, FLEX | 30 tests, 6 mL△ |

Mismatch repair gene *hMLH1* is a ubiquitous gene encoding the mismatch repair protein (MMR) known as MutL protein homolog 1 (MLH1). MLH1 is utilized by normal proliferating cells to repair point mutations that may occur during DNA replication. Antibodies to MLH1 are a useful aid for classification of colorectal cancer.



*Colon adenocarcinoma (FFPE) stained with FLEX Anti-MutL Protein Homolog 1, Code IR079/IS079.*

Monoclonal Mouse Anti-Human
**MutS Protein Homolog 2**

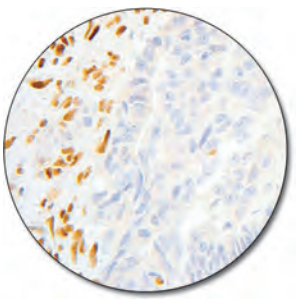
Clone: FE11
Isotype: IgG1, kappa

● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M3639 Ascites, protein A purified | 0.2 mL/1 mL |
| IVD | IR085 RTU★, FLEX | 60 tests, 12 mL▲ |

MutS protein homolog 2 (MSH2) is part of the mismatch repair (MMR) pathway which is utilized by normal proliferating cells to repair mutations that may occur during DNA replication. Antibodies to MSH2 are a useful aid for classification of tumors of the gastrointestinal tract, including associated extracolonic cancers.
Reference:


1. Peltomäki P. Role of DNA mismatch repair defects in the pathogenesis of human cancer. J Clin Oncol 2003;21:1174-9.

*Colon adenocarcinoma (FFPE) with loss of MSH2 protein stained with FLEX Anti-MSH2, Code IR085.*

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Rabbit Anti-Human
**MutS Protein Homolog 6**

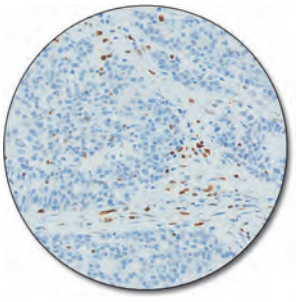
Clone: EP49

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3646 | Affinity-isolated | 0.2 mL/1 mL |
| IVD | IR086 | RTU★, FLEX | 60 tests, 12 mL▲ |

MutS protein homolog 6 (MSH6) is part of the mismatch repair (MMR) pathway which is utilized by normal proliferating cells to repair mutations that may occur during DNA replication. Antibodies to MSH6 are a useful aid for classification of tumors of the gastrointestinal tract, including associated extracolonic cancers

Reference:
1. Peltomäki P. Role of DNA mismatch repair defects in the pathogenesis of human cancer. J Clin Oncol 2003;21:1174-9.



*Colon adenocarcinoma (FFPE) with loss of MSH6 protein stained with FLEX Anti-MSH6, Code IR086.*

Polyclonal Rabbit Anti-Human
**Myelin Basic Protein**

● Formalin

| | | | |
|---|---|---|---|
| IVD | A0623 | Ig fraction | 1 mL |

Labels myelin membranes of oligodendrocytes and Schwann cells.

Monoclonal Mouse Anti-Human
**Myeloid/Histiocyte Antigen**

Clone: MAC 387
Isotype: IgG1, kappa

● Formalin ● (Enzyme)

| | | | |
|---|---|---|---|
| IVD | M0747 | Culture supernatant | 1 mL |

Reacts with a human cytoplasmic antigen (L1-antigen or calprotectin) which contains two different subunits (L1H and L1L). The protein is a member of the S100 family, and the subunits are in this context termed S100A8 and S100A9. It is expressed in granulocytes, blood monocytes, tissue histiocytes, squamous mucosal epithelia, and reactive epidermis. The antibody is a useful aid for classification of malignant lymphomas and lymphoid neoplasms of histiocytic origin.

References:
1. Fagerhol MK. Nomenclature for proteins: is calprotectin a proper name for the elusive myelomonocytic protein? J Clin Pathol: Mol Pathol 1996;49:M74-9.
2. Schäfer BW, Heizmann CW. The S100 family of EF-hand calciumbinding proteins: functions and pathology. Trends Biochem Sci 1996;21:134-40.

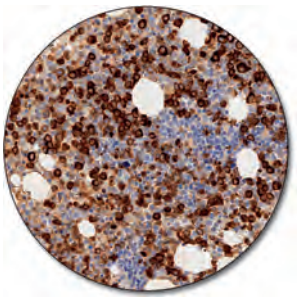
Polyclonal Rabbit Anti-Human
**Myeloperoxidase**

● Formalin ● Enzyme/HIER

| | | | |
|---|---|---|---|
| IVD | A0398 | Ig fraction | 0.2 mL |
| IVD | GA511 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR511 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS511 | RTU★, FLEX | 30 tests, 6 mL△ |

The antigen has been isolated from primary granulocytes (1). The antibody reacts with neutrophil granulocytes and monocytes in blood and with precursors of granulocytes in the bone marrow. The antibody is useful as an aid for classification of neoplastic tissue, i.e. myeloblasts and immature myeloid cells of acute myelogenous leukemia, progranulocytic leukemia, monomyelocytic leukemia, erythroleukemia and myeloblastoma (2).

References:
1. Matheson NR, Wong PS, Travis J. Isolation and properties of human neutrophil myeloperoxidase. Biochem 1981;20:325-30.
2. Pinkus GS, Pinkus JI. Myeloperoxidase: a specific marker for myeloid cells in paraffin sections. Mod Pathol 1991;4:733-41.



*Acute myeloid leukemia (FFPE) stained with FLEX Anti-Myeloperoxidase, Code GA511, on Dako Omnis.*

Monoclonal Mouse Anti-
**MyoD1**

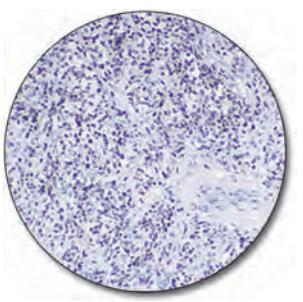
Clone: 5.8A
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3512 | Culture supernatant | 1 mL |

The MyoD1 protein is a 45 kDa nuclear phosphoprotein which induces myogenesis through transcriptional activation of muscle-specific genes. Nuclear expression of MyoD1 is restricted to skeletal muscle tissue and has been demonstrated to be a sensitive marker of myogenic differentiation. The antibody strongly labels the nuclei of myoblasts in developing skeletal muscle tissue, whereas the majority of adult skeletal muscle is negative. Results aid in the classification of rhabdomyosarcomas of various histological subtypes.

Reference:
1. Dias P, Parham DM, Shapiro DN, Tapscott SJ, Houghton PJ. Monoclonal antibodies to the myogenic regulatory protein MyoD1: epitope mapping and diagnostic utility. Cancer Res 1992;52:6431-9.



*Rhabdomyosarcoma (FFPE) stained with Anti-MyoD1, Code M3512.*



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

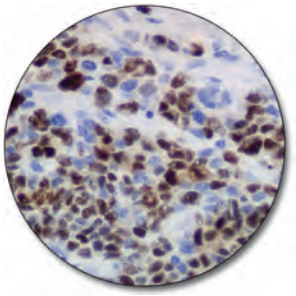
Monoclonal Mouse Anti-
**Myogenin**

Clone: F5D
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M3559 Ig fraction of culture supernatant | 1 mL |
| IVD | IR067 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS067 RTU★, FLEX | 30 tests, 6 mL△ |

Myogenin belongs to a family of regulatory proteins essential for muscle development. Expression of myogenin is restricted to cells of skeletal muscle origin, and appears to be inversely related to the degree of cellular differentiation. The antibody recognizes an epitope located in the amino acid region 138-158 of the myogenin protein. The antibody is a useful aid for classification of rhabdomyosarcomas and Wilms' tumors. No reactivity with Ewing's sarcoma/peripheral primitive neuroectodermal tumor, neuroblastoma, or adult skeletal muscle has been observed. Myogenin peptide from rat has been used for immunization.



*Rhabdomyosarcoma (FFPE) stained with FLEX Anti-Myogenin, Code IR067/IS067.*

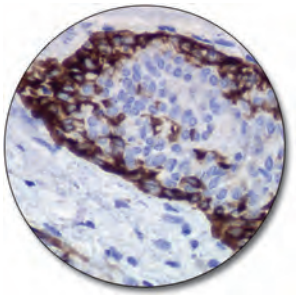
Monoclonal Mouse Anti-Human
**Myosin Heavy Chain (Smooth Muscle)**

Clone: SMMS-1
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme + HIER

| | | |
|---|---|---|
| IVD | M3558 Culture supernatant | 1 mL |
| IVD | IR066 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS066 RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with smooth muscle cells and myoepithelial cells, but not with myofibroblasts. The antibody is a useful aid for classification of breast tumors.



*Breast hyperplasia (FFPE) stained with FLEX Anti-Myosin Heavy Chain (Smooth Muscle), Code IR066/IS066.*

Monoclonal Mouse Anti-Human
**N-Cadherin**

Clone: 6G11
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M3613 Culture supernatant | 1 mL |

N-cadherin is a 140 kDa protein belonging to a family of transmembrane molecules that mediate calcium-dependent intercellular adhesion. Cadherins are involved in controlling morphogenetic movements during development and regulate cell surface adhesion through homotypic adhesion with the same cadherin species.
Expression of N-cadherin has been reported on a variety of normal tissues including neuronal, endothelial and muscle cells, and a subpopulation of early hematopoietic progenitor cells. Results aid in the classification of malignant noncarcinomatous neoplasms including mesotheliomas, chordomas, synovial sarcomas, malignant melanomas, epithelioid sarcomas, epithelioid angiosarcomas, clear cell sarcomas as well as serous and endometrioid tumors of the ovary have been demonstrated to be N-cadherin positive, whereas mucinous tumors are negative. Other N-cadherin-positive neoplasms include renal cell carcinomas and some variant breast tumors, including medullary breast carcinomas and sarcomatoid metaplastic breast carcinomas.

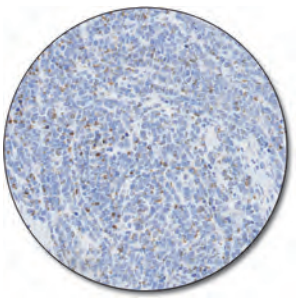
Monoclonal Mouse Anti-Human
**Neurofilament Protein**

Clone: 2F11
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M0762 Culture supernatant | 0.2 mL |
| IVD | GA607 RTU★, FLEX **NEW** | 60 tests, 12 mL◆ |
| IVD | IR607 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS607 RTU★, FLEX | 30 tests, 6 mL△ |

Neurofilaments belong to the family of intermediate filaments and are structural elements of the neuronal cytoskeleton in an interconnection with actin microfilaments, microtubules and other intermediate filaments. This antibody labels neurons (axons) of the central and peripheral nervous system, and is a useful aid for classification of tumors with neuronal differentiation.



*Merkel cell tumor (FFPE) stained with FLEX Anti-Neurofilament Protein, Code GA607, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**Neuron-Specific Enolase (NSE)**

Clone: BBS/NC/VI-H14
Isotype: IgG1, kappa

● Formalin ● HIER

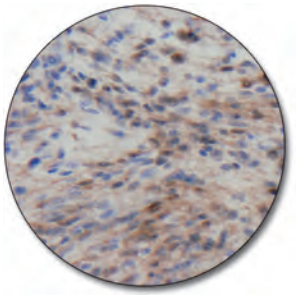
| | | |
|---|---|---|
| IVD | M0873 Culture supernatant | 0.2 mL/1 mL |
| IVD | IR612 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS612 RTU★, FLEX | 30 tests, 6 mL△ |

Neuron-specific enolase is one of three main groups of enolases, the other two being non-neuronal enolase and muscle-specific enolase. The antibody labels cells of neuronal and neuroendocrine origin. Although neuron-specific enolase is not an exclusive neuronal marker, it may be used for the identification of peripheral nerves. Results aid in the classification of neural and neuroendocrine tumors, such as neuroblastomas, retinoblastomas, desmoplastic malignant melanoma, and small-cell lung cancer.





◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections



*Schwannoma (FFPE) stained with FLEX Anti-Neuron-Specific Enolase, Code IR612/IS612.*

Monoclonal Mouse Anti-Human
**Neutrophil Elastase**

Clone: NP57
Isotype: IgG1, kappa

● Frozen ● Formalin

| | | | |
|---|---|---|---|
| IVD | M0752 | Culture supernatant | 1 mL |

Labels neutrophil precursors strongly. A minor population of monocytes is also labeled, but with a lower intensity. The antibody is a useful aid for classification of acute myeloid leukemia and extramedullary myeloid cell tumor (1).
Note: The neutrophil elastase epitope corresponding to this antibody is destroyed by heat-induced epitope retrieval methods.

Reference:

1. Pulford KAF, Erber WN, Crick JA, Olsson I, Micklem KJ, Gatter KC, et al. Use of monoclonal antibody against human neutrophil elastase in normal and leukaemic myeloid cells. J Clin Pathol 1988;41:853-60.

Monoclonal Mouse Anti-Human
**Nucleophosmin**

Clone: 376
Isotype: IgG1, lambda

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7305 | Culture supernatant | 1 mL |
| IVD | GA652 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR652 | RTU★, FLEX | 60 tests, 12 mL▲ |

Reacts with nucleophosmin (NPM) and its mutated counterpart NPMc. NPM is predominantly localized in the nucleus of cells in most tissues. However, NPMc is aberrantly accumulated in the cytoplasm of leukemic blasts in a large subgroup of acute myeloid leukemia (AML) cases with a normal karyotype (1-2). The antibody may be a useful aid for classification of acute myeloid leukemia (3).

References:

1. Falini B, Mecucci C, Tiacci E, Alcaly M, Rosatin R, Pasqualucci L, et al. Cytoplasmic nucleophosmin in acute myologenous leukemia with a normal karyotype. New Engl J Med 2005;352:254-66.
2. Falini B, Bolli N, Shan J, Martelli PM, Liso A, Pucciarini A, et al. Both carboxy-terminus NES motif and mutated tryptophan(s) are crucial for aberrant nuclear export of nucleophosmin leukemic mutants in NPMc+ AML. Blood 2006;107:4514-23.
3. Pasqualucci L, Liso A, Martelli MP, Bolli N, Pacini R, Tabarrinni A, et al. Mutated nucleophosmin detects clonal multilineage involvement in acute myeloid leukemia: Impact on WHO classification. Blood 2006: Epub. ahead of print.

*Acute myeloid leukemia (AML) (FFPE) stained with FLEX Anti-Nucleophosmin, Code GA652, on Dako Omnis.*

Monoclonal Mouse Anti-Human
**Octamer-Binding Transcription Factor 3/4**

Clone: N1NK
Isotype: IgG1, kappa

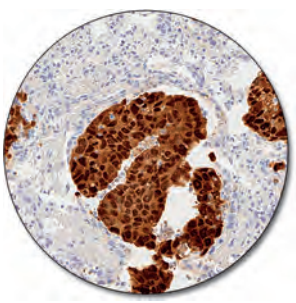
● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3649 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR092 | RTU★, FLEX | 60 tests, 12 mL▲ |

Octamer-binding transcription factor 3/4 (OCT3/4) is expressed in early embryonic cells and germ cells and is central to the gene regulatory network responsible for self-renewal, pluripotency, and lineage commitment in embryonic stem cells and induced pluripotent stem cells (1).
Antibodies to OCT3/4 may be a useful aid for classification of specific subtypes of germ cell tumors including seminoma, embryonal carcinoma and intratubular germ cell neoplasia of unclassified type (IGCNU) (2, 3).

References:

1. Bhartiya D, Kasiviswanathan S, Unni SK, Pethe P, Dhabalia J, Patwardhan S, et al. Newer insights into premeiotic development of germ cells in adult human testis using Oct-4 as a stem cell marker. J Histochem Cytochem 2010;58:1093-1106.
2. Cheng L. Establishing a germ cell origin for metastatic tumors using OCT4 immunohistochemistry. Cancer 2004;101:2006-10.
3. Jones TD, Ulbright TM, Eble JN, Cheng L. OCT4: a sensitive and specific biomarker for intratubular germ cell neoplasia of the testis. Clin Cancer Res 2004;10:8544-7.



*Embryonal carcinoma (FFPE) stained with FLEX Anti-OCT3/4, Code IR092.*



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**p21$^{WAF1/Cip1}$**

Clone: SX118
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7202 Culture supernatant | 0.2 mL |

The protein p21$^{WAF1/Cip1}$ inhibits the activity of several cyclin/cyclin-dependent kinase complexes and blocks cell-cycle progression (1). In tumor cells that have lost the p53 protein, or contain an altered form of p53, p21$^{WAF1/Cip1}$ levels are dramatically reduced or totally absent (2). Because p21$^{WAF1/Cip1}$ appears to mediate several of the growth-regulatory functions of p53, its expression would be predicted to reflect the functional status of p53 more precisely than p53 accumulation.

References:

1. Xiong Y, Hannon GJ, Zhang H, Casso D, Kobayashi R, Beach D. p21 is a universal inhibitor of cyclin kinases. Nature 1993;366:701-4.
2. El-Deiry WS, Tokino T, Velculescu VE, Levy DB, Parsons R, Trent JM, et al. WAF1, a potential mediator of p53 tumor suppression. Cell 1993;75:817-25.


Monoclonal Mouse Anti-Human
**p27$^{Kip1}$**

Clone: SX53G8
Isotype: IgG1, kappa

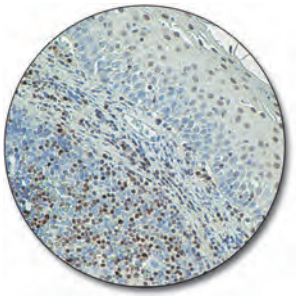
● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7203 Culture supernatant | 1 mL |

p27$^{Kip1}$, a cyclin-dependent kinase (cdk) inhibitor, regulates progression from $G_1$ into S phase of the cell cycle by binding and inhibiting cyclin/cdks (1, 2). p27$^{Kip1}$ exhibits structural and functional similarities with p21$^{WAF1/Cip1}$ (1).

References:

1. Toyoshima H, Hunter T. p27, a novel inhibitor of G1 cyclin-cdk protein kinase activity, is related to p21. Cell 1994;78:67-74.
2. Polyak K, Lee M-H, Erdjument-Bromage H, Koff A, Roberts JM, Tempst P, et al. Cloning of p27$^{Kip1}$, a cyclin-dependent kinase inhibitor and a potential mediator of extracellular antimitogenic signals. Cell 1994;78:59-66.

*Tonsil (FFPE) stained with Anti-p27$^{Kip1}$, Code M7203.*

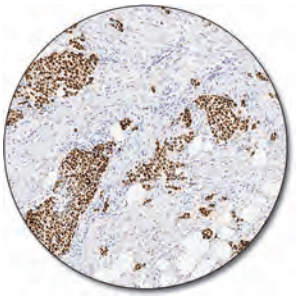
Monoclonal Mouse Anti-Human
**p53 Protein**

Clone: DO-7
Isotype: IgG2b, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7001 Culture supernatant | 0.2 mL/1 mL |
| IVD | GA616 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR616 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS616 RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with the wild type and mutant type of the p53 protein. The antibody is a useful aid for classification of tumors of all cell lineages.



*Invasive transitional cell carcinoma (FFPE) stained with FLEX Anti-p53, Code GA616, on Dako Omnis.*

Monoclonal Rabbit Anti-Human
**p53 Protein**

Clone: 318-6-11

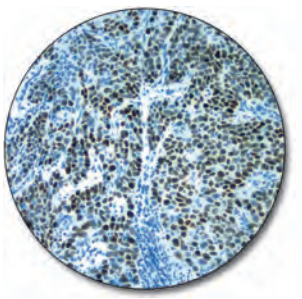
● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M3629 Culture supernatant | 0.2 mL/1 mL |

This monoclonal **rabbit** antibody is useful for the identification of p53 protein. The *p53* tumor suppressor gene is activated by DNA damage, abnormal growth signals, and other intrinsic and extrinsic stresses. In normal cells, the expression level of p53 protein is generally below the detection level of immunohistochemical methods. Mutations of the *p53* gene are among the most common molecular changes identified in human cancers. These mutations can result in accumulation and overexpression of mutant p53 protein. Results aid in the classification of a range of human tumor types from organs such as bladder, colorectum, esophagus, lung, head and neck, ovary, pancreas, prostate, skin, stomach, and many others.

References:

1. Harris SL, Levine AJ. The p53 pathway: positive and negative feedback loops [review]. Oncogene 2005;24:2899-908.
2. Steele RJ, Lane DP. P53 in cancer: a paradigm for modern management of cancer [review]. Surgeon 2005;3:197-05.

*Squamous cell carcinoma (FFPE) stained with Anti-p53 Protein, Code M3629.*

**P501S**

See: Prostein

**P504S**

See: AMACR

Monoclonal Mouse Anti-Human
**Papillomavirus (HPV)**

Clone: K1H8
Isotype: IgG1, kappa

| | | |
|---|---|---|
| ASR | M3528 Culture supernatant | 1 mL |

Alkaline-disrupted HPV, type 1, has been used for the immunization. The antibody reacts with a non-conformational, internal, linear epitope of a major capsid protein of HPV-1. This epitope is broadly expressed among the different HPV subtypes 6, 11, 16, 18, 31, 33, 42, 51, 52, 56 and 58.



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Polyclonal Rabbit Anti-
**PGP 9.5**

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | Z5116 | Ig fraction | 1 mL |

Protein gene product 9.5 (PGP 9.5) isolated from bovine brain has been used for immunization. PGP 9.5 is a pan-neuronal marker. The antibody is a useful aid for the classification of neuroendocrine tumors.

**Phagocytic Glycoprotein-1**

See: CD44, Phagocytic Glycoprotein-1

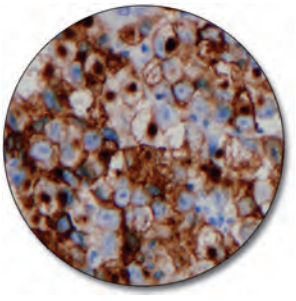
Monoclonal Mouse Anti-Human
**Placental Alkaline Phosphatase**

Clone: 8A9
Isotype: IgG1, kappa

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7191 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR779 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS779 | RTU★, FLEX | 30 tests, 6 mL△ |

The antibody is a useful aid for classification of many different types of germ cell neoplasia and carcinomas of the lung, stomach, pancreas, breast and ovary.



*Seminoma (FFPE) stained with FLEX Anti-Placental Alkaline Phosphatase, Code IR779/IS779.*

**Dako FLEX RTU Antibodies for Reproductive System Testing**

See our panel of FLEX antibodies at page 69

Monoclonal Mouse Anti-Human
**Plasma Cell**

Clone: VS38c
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7077 | Culture supernatant | 1 mL |

Recognizes an intracellular protein of 63 kDa identical with the rough endoplasmic reticulum-associated protein p63. The antibody labels plasma cells strongly, but frequently also labels melanocytic cells and a number of epithelial cells, e.g. in mucous glands and tonsils, and secretory epithelia in breast, thyroid and pancreas, both benign and malignant.
The antibody is useful for classification of myeloma/plasmacytoma and immunocytoma as well as plasmacytic B-cell neoplasms.

References:

1. Turley H, Jones M, Erber W, Mayne K, de Waele M, Gatter K. VS38: a new antibody for detecting plasma cell differentiation in routine sections. J Clin Pathol 1994;47:418-22.
2. Schweizer A, Rohrer J, Slot JW, Geuze HJ, Kornfeld S. Reassessment of the subcellular localization of p63. J Cell Sci 1995;108:2477-85.
3. Banham AH, Turley H, Pulford K, Gatter K, Mason DY. The plasma cell associated antigen detectable by antibody VS38 is the p63 rough endoplasmic reticulum protein. J Clin Pathol 1997;50:485-9.
4. Shanks JH, Bannerjee SS. VS38 immunostaining in melanocytic lesions. J Clin Pathol 1996;49:205-7.

**Platelet Glycoprotein**

See: CD61

Monoclonal Mouse Anti-Human
**Podoplanin**

Clone: D2-40
Isotype: IgG1, kappa

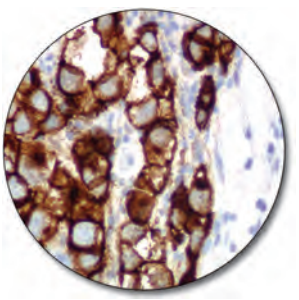
● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3619 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR072 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS072 | RTU★, FLEX | 30 tests, 6 mL△ |

Identifies the ~38 kDa O-linked transmembrane sialoglycoprotein podoplanin, which is expressed in the endothelium of lymphatic capillaries, but not in the blood vasculature (1). Besides the expression in lymphatic endothelium, podoplanin is also found in a variety of other tissues, including mesothelial cells, reticular cells, follicular dendritic cells, ovarian and testicular germ cells (2). Results aid in the classification of lymphatic invasion of primary tumors.

References:

1. Breiteneder-Geleff S, Soleiman A, Kowalski H, Horvat R, Amann G, Kriehuber E, et al. Angiosarcomas express mixed endothelial phenotypes of blood and lymphatic capillaries: podoplanin as a specific marker for lymphatic endothelium. Am J Pathol 1999;154:385-94.
2. Kalof AN and Cooper K. D2-40 Immunohistochemistry. Adv Anat Pathol 2009;16: 62-4.



*Seminoma (FFPE) stained with FLEX Podoplanin, Code IR072/IS072.*

**Dako FLEX RTU Antibodies for Respiratory System Testing**

See our panel of FLEX antibodies at page 70

Monoclonal Rabbit Anti-Human
**Postmeiotic Segregation Increased 2**

Clone: EP51

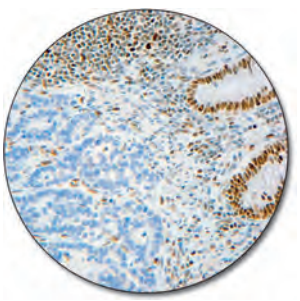
● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3647 | Affinity isolated | 0.2 mL/1 mL |
| IVD | IR087 | RTU★, FLEX | 60 tests, 12 mL▲ |

Postmeiotic segregation increased 2 (PMS2) is part of the DNA mismatch repair (MMR) pathway, which is utilized by normal proliferating cells to repair mutations that may occur during DNA replication.
Antibodies to PMS2 may be a useful aid for classification of tumors of the gastrointestinal tract, including HNPCC and associated extracolonic cancers.

Reference:

1. Peltomäki P. Role of DNA mismatch repair defects in the pathogenesis of human cancer. J Clin Oncol 2003;21:1174-9.



*Colon adenocarcinoma (FFPE) with loss of PMS2 protein stained with FLEX Anti-PMS2, Code IR087.*

▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

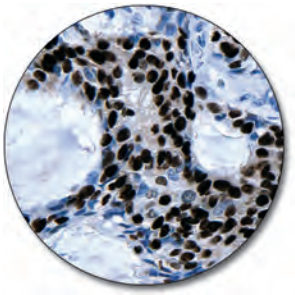
Monoclonal Mouse Anti-Human
**Progesterone Receptor**

Clone: PgR 636
Isotype: IgG1, kappa

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3569 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR068 | RTU★, FLEX | 60 tests, 12mL▲ |

Labels the nuclei of cells known to contain a high level of progesterone receptor. This is, e.g., normal, hyperplastic and neoplastic cells of the mammary gland as well as epithelial and myometrial cells of the uterus.



*Breast ductal carcinoma (FFPE) stained with FLEX Anti-Progesterone Receptor.*

Monoclonal Mouse Anti-Human
**Progesterone Receptor**

Clone: PgR 1294
Isotype: IgG1, kappa

● Formalin

| | | | |
|---|---|---|---|
| IVD | M3568 | Culture supernatant | 1 mL |

Human progesterone receptor belongs to a family of ligand-dependent nuclear receptors which function as transcription factors, mediating the gowth of target tissues. The antibody recognizes the A and B forms of the receptor.

Polyclonal Rabbit Anti-Human
**Prolactin**

● Frozen ● Formalin

| | | | |
|---|---|---|---|
| IVD | A0569 | Whole serum | 1 mL |

Reacts with prolactin-producing cells in the normal pituitary and is a useful aid for classification of pituitary adenomas.

Monoclonal Mouse Anti-
**Proliferating Cell Nuclear Antigen**

Clone: PC10
Isotype: IgG2a, kappa

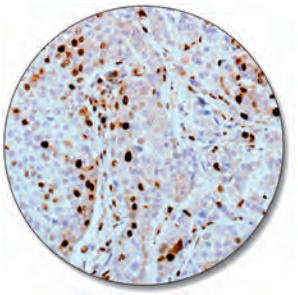
● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0879 | Culture supernatant | 1 mL |

The antibody reacts with a simple, linear epitope in proliferating cell nuclear antigen (PCNA). The PCNA is expressed by proliferating cells and reaches its maximum synthesis during the S-phase of the cell cycle.

References:

1. Roos G, Landberg G, Huff JP, Houghten R, Takasaki Y, Tan EM. Analysis of the epitopes of proliferating cell nuclear antigen recognized by monoclonal antibodies. Lab Invest 1993;68:204-10.
2. Bromley M, Rew D, Becciolini A, Balzi M, Chadwick C, Hewitt D, et al. A comparison of proliferation markers (BrdUrd, Ki-67, PCNA) determined at each cell position in the crypts of normal human colonic mucosa. Eur J Histochem 1996;40:89-100.
3. Yu CC-W, Filipe M. Update on proliferation-associated antibodies applicable to formalin-fixed paraffin-embedded tissue and their application. Histochem J 1993;25:843-53.



*Breast carcinoma (FFPE) stained with Anti-Proliferating Cell Nuclear Antigen.*

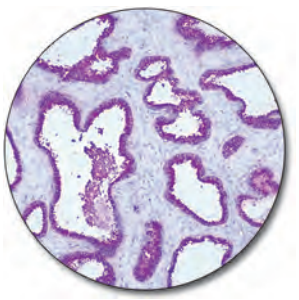
Monoclonal Mouse Anti-Human
**Prostate-Specific Antigen (PSA)**

Clone: ER-PR8
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme/HIER

| | | | |
|---|---|---|---|
| IVD | M0750 | Culture supernatant | 0.2 mL |

Reacts with prostate secretory and ductal epithelium in normal and neoplastic tissue. The antibody is a useful aid for classification of neoplasms of prostatic origin.



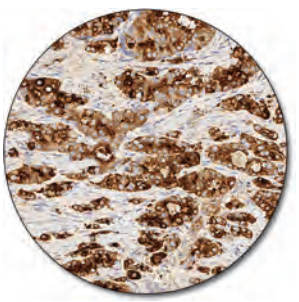
*Prostate (FFPE) stained with Anti-PSA, Code M0750.*

Polyclonal Rabbit Anti-Human
**Prostate-Specific Antigen (PSA)**

● Formalin

| | | | |
|---|---|---|---|
| IVD | A0562 | Ig fraction | 1 mL |
| IVD | GA514 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR514 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS514 | RTU★, FLEX | 30 tests, 6 mL△ |

Prostate-specific antigen (PSA) is a 33 kDa protein belonging to the kallikrein family of proteases. It is primarily produced by the prostatic epithelium and the epithelial lining of the periurethal glands. PSA is strongly expressed in both normal and neoplastic prostatic tissue. This antibody is a useful aid for the identification of human prostate-specific antigen.



*Prostate adenocarcinoma (FFPE) stained with FLEX Anti-Prostate Specific Antigen, Code GA514, on Dako Omnis.*

**Dako FLEX RTU Antibodies for Prostate Testing**

See our panel of FLEX antibodies at page 69

◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**Prostate-Specific Membrane Antigen (PSMA)**

Clone: 3E6
Isotype: IgG1, kappa

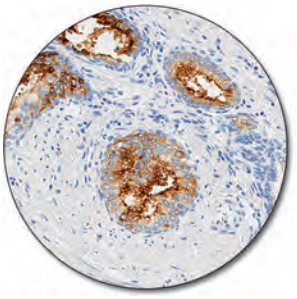
● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3620 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR089 | RTU★, FLEX | 60 tests, 12 mL▲ |

Prostate-specific membrane antigen (PSMA) is expressed in normal and malignant prostatic epithelium and in a subset of non-prostatic tissues. In prostate cancer, PSMA expression has been shown to correlate with disease progression, with highest levels expressed in hormone-refractory and metastatic disease. The cellular localization of PSMA is cytoplasmic and/or membranous. This antibody labels PSMA-expressing cells in normal and neoplastic tissues and is a useful aid for classification of prostate adenocarcinomas.

Reference:

1. Mannweiler S, Amersdorfer P, Trajanoski S, Terrett J, King D, Mehes G. Heterogeneity of prostate-specific membrane antigen (PSMA) expression in prostate carcinoma with distant metastasis. Pathol Oncol Res 2009;15:167-72.



*Prostatic intraepithelial neoplasia (PIN) (FFPE) stained with FLEX Anti-PSMA, Code IR089.*

Monoclonal Mouse Anti-Human
**Prostatic Acid Phosphatase**

Clone: PASE/4LJ
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0792 | Culture supernatant | 1 mL |

Reacts with the glandular epithelium of prostate. Results aid in the classification of prostate carcinoma. Occasionally, carcinoid tumors may be labeled.

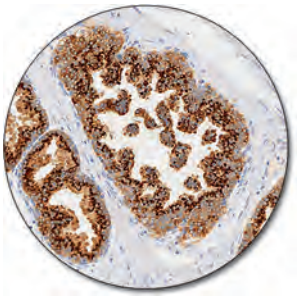
Monoclonal Mouse Anti-Human
**Prostein**

Clone: 10E3
Isotype: IgG2a, kappa

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3615 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR088 | RTU★, FLEX | 60 tests, 12 mL▲ |

Prostein is a 553-amino acid protein, also known as P501S. Prostein protein is a type IIIa plasma membrane protein which has been shown to be exclusively expressed in cells of normal and malignant prostate by Northern blot, cDNA microarray, real-time PCR and immunohistochemistry. Prostein is localized to the Golgi complex in the cytoplasm of cells and is expressed by both benign and neoplastic prostate tissue, whereas it has not been detected in any other normal or malignant tissue examined.
This antibody is a useful aid for classification of prostate adenocarcinomas.



*Prostatic intraepithelial neoplasia (PIN) (FPPE) stained with FLEX Anti-Prostein, Code IR088.*

Monoclonal Mouse Anti-Human
**PTEN**

Clone: 6H2.1
Isotype: IgG2a, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3627 | Culture supernatant | 0.2 mL |

The PTEN protein is a lipid phosphatase with tumor-suppressing abilities. Results aid in the classification of a variety of malignancies, including breast (1), prostate (2) and endometrial cancer.

References:

1. Perren A, Weng LP, Boag AH, Ziebold U, Thakore K, Dahia PL, et al. Immunohistochemical evidence of loss of PTEN expression in primary ductal adenocarcinomas of the breast. Am J Pathol 1999;155:1253-60.
2. McMenamin ME, Soung P, Perera S, Kaplan I, Loda M, Sellers WR. Loss of PTEN expression in paraffin-embedded primary prostate cancer correlates with high Gleason score and advanced stage. Cancer Res 1999;59:4291-6.

**Rat Ki-67 Antigen**

See: Ki-67 Antigen

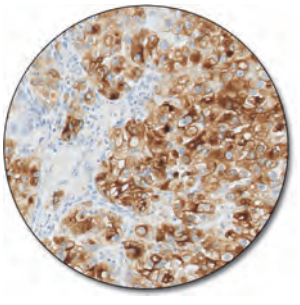
Monoclonal Mouse Anti-Human
**Renal Cell Carcinoma Marker**

Clone: SPM314
Isotype: IgG2b, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3632 | Culture supernatant | 1 mL |
| IVD | GA075 | RTU★, FLEX **NEW** | 60 tests, 12 mL◆ |
| IVD | IR075 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS075 | RTU★, FLEX | 30 tests, 6 mL△ |

Reacts with renal cell carcinoma marker (gp200), a surface membrane glycoprotein. The antigen is expressed on the brush border of proximal renal tubules and on the luminal surface of Bowman's capsule, as well as in parathyroid parenchymal cells and colloid of thyroid follicles. The antibody is a useful aid for classification of primary and metastatic renal cell carcinomas.



*Renal clear cell carcinoma (FFPE) stained with FLEX Anti-Renal Cell Carcinoma Marker, Code GA075, on Dako Omnis.*



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**Ribosomal Protein S6-pS240 Phosphorylation Site Specific**

Clone: DAK-S6-240
Isotype: IgG1

● Formalin ● HIER

| | | | |
|---|---|---|---|
| RUO | M7300 | Culture supernatant | 0.2 mL |

Reacts with human ribosomal protein S6 phosphorylated at serine residue 240 (pS240). Phosphorylation of ribosomal protein S6 correlates with an increase in translation of mRNAs that encode for proteins involved in cell cycle progression and proteins controlling mammalian cell growth and proliferation.

Polyclonal Rabbit Anti-
**S100**

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | Z0311 | Ig fraction | 0.2 mL/1 mL |
| IVD | GA504 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR504 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS504 | RTU★, FLEX | 30 tests, 6 mL△ |

Reacts strongly with human S100B, and weakly or very weakly with S100A1 and S100A6, respectively. S100 from ox brain has been used for the immunization. Z0311 labels glial cells in the brain and ependymal cells. Moreover, Schwann's cells of the peripheral nervous system are positive. Results aid in the classification of tumors in central and peripheral nervous system, such as schwannomas, ependydomas as well as in different grades of astrogliomas, also including glioblastomas. A large proportion of cells in human tumors originating from different salivary glands are labeled by anti-S100. The antibody is also a useful aid for classification of malignant melanocytic tumors of the skin and metastases of human malignant melanomas.

*Breast carcinoma (FFPE) stained with FLEX Anti-S100, Code GA504, on Dako Omnis.*

Polyclonal Rabbit Anti-Human
**S100A4**

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| RUO | A5114 | Ig fraction | 1 mL |

Recombinant human S100A4 has been used for immunization.

Monoclonal Mouse Anti-Human
**Serotonin**

Clone: 5HT-H209
Isotype: IgG1, kappa

● Frozen ● Formalin

| | | | |
|---|---|---|---|
| IVD | M0758 | Culture supernatant | 1 mL |

Reacts with serotonin in a broad range of normal, hyperplastic and neoplastic tissues. Serotonin is also called 5-hydroxytryptamine. The antibody is a useful aid for classification of primary and metastatic carcinoid tumors expressing serotonin.

Polyclonal Rabbit Anti-Human
**Somatostatin**

● Frozen ● Formalin

| | | | |
|---|---|---|---|
| IVD | A0566 | Whole serum | 1 mL |

Somatostatin is one of seven known polypeptide hormones produced in the pancreas. It functions as an inhibitory hormone of the neuroendocrine system and is secreted by D cells of the islets of Langerhans, the fundus and antrum of the stomach and in the upper small intestine. The antibody labels somatostatin-containing cells and is a useful aid for classification of pancreatic tumors and islet cell hyperplasia.

Monoclonal Mouse Anti-Human
**Survivin**

Clone: 12C4
Isotype: IgG2a, kappa

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3624 | Culture supernatant | 0.2 mL |

Survivin is a member of the inhibitor of apoptosis (IAP) gene family which counteracts apoptosis by inhibiting the activity of initiator and effector caspases. Survivin associates with the microtubules in the mitotic spindle and antagonizes mitochondrial-dependent apoptosis. In addition to cell death regulation, survivin has also been shown to be important in cell division and its expression is controlled at the transcriptional level in a cell cycle dependent manner. Results aid in the classification of a wide variety of neoplasms including tumors of the lung, breast, colon, stomach, esophagus, pancreas, liver, uterus, ovaries, Hodgkin's disease, non-Hodgkin's lymphoma, leukemias, neuroblastoma, phaeochromocytoma, soft-tissue sarcoma, gliomas and melanomas. The cellular localization of survivin is nuclear and/or cytoplasmic.

Monoclonal Mouse Anti-Human
**Synaptophysin**

Clone: DAK-SYNAP
Isotype: IgG1, kappa

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7315 | Culture supernatant | 0.2 mL/1 mL |
| IVD | IR660 | RTU★, FLEX | 60 tests, 12 mL▲ |

Synaptophysin is a 38 kDa membrane glycoprotein expressed in neuroendocrine cells and neurons involved in transmission via synaptic vehicles.
Results aid in the classification of neuroendocrine neoplasms, such as neuroendocrine lung tumors (e.g. carcinoid, atypic carcinoid, SCLC, LCNEC and non-small cell lung cancer), neuroendocrine tumors of the gastroentero-pancreatic tract, e.g. neuroendocrine tumors (NETs), neuroendocrine carcinoma (NECs) and other epithelial neuroendocrine neoplasms such as pituitary adenomas, medullary thyroid carcinoma and parathyroid adenomas.
Clone DAK-SYNAP is raised against a recombinant immunogen corresponding to the C-terminal cytoplasmic domain of human synaptophysin.

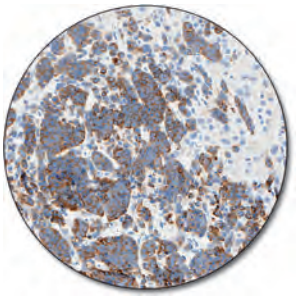
References:

1. Wiedenmann B, Franke WW. Identification and localization of synaptophysin, an integral membrane glycoprotein of Mr 38,000 characteristic of presynaptic vesicles. Cell 1985;40:1017-28.
2. Kwon SE, Chapman ER. Synaptophysin regulates the kinetics of synaptic vesicle endocytosis in central neurons. Neuron 2011:70:847-85.





◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections



*Small cell lung cancer (FFPE) stained with FLEX Anti-Synaptophysin, Code IR660.*

**Dako FLEX RTU Antibodies for Nervous System Testing**

See our panel of FLEX antibodies at page 68

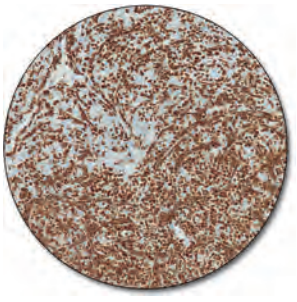
Monoclonal Rabbit Anti-Human
**Terminal Deoxynucleotidyl Transferase (TdT)**

Clone: EP266

● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3651 | Culture supernatant | 1 mL |
| IVD | IR093 | RTU★, FLEX | 60 tests, 12 mL▲ |

Reacts with the nuclei of normal B and T-lymphocyte precursors and their equivalents. Antibodies to terminal deoxynucleotidyl transferase (TdT) may be a useful aid for classification of precursor B and T-cell acute lymphoblastic leukemia (ALL) and thymoma.



*Thymoma (FFPE) stained with FLEX Anti-TdT, Clone EP266, Code IR093.*

Monoclonal Mouse Anti-
**Thrombomodulin**

Clone: 1009
Isotype: IgG1, kappa

● Frozen ● Formalin

| | | | |
|---|---|---|---|
| IVD | M0617 | Culture supernatant | 1 mL |

Thrombomodulin (TM) is an endothelial cell transmembrane glycoprotein. The normal distribution of TM includes the lining of blood and lymphatic vessels, mesothelial cells and some macrophages of the lung, meningeal lining cells, synovial cells, syncytiotrophoblasts, megakaryocytes and platelets. Results aid in the classification of mesothelioma (1).

Reference:

1. Collins CL, et al. Thrombomodulin expression in malignant pleural mesothelioma and pulmonary adenocarcinoma. Am J Pathol 1992;141:827.

Monoclonal Mouse Anti-Human
**Thymidylate Synthase**

Clone: TS106
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3614 | Culture supernatant | 1 mL |

Thymidylate synthase (TS) is a key enzyme in the synthesis of DNA. TS, along with methyl donor 5,10-methylenetetrahydrofolate, catalyzes the methylation of deoxyuridine monophosphate (dUMP) to deoxythymidine monophosphate (dTMP) to generate the thymine nucleotides necessary for DNA biosynthesis. TS is also a target for fluorinated pyrimidine drugs such as 5-fluorouracil (5-FU). The active metabolite of 5-FU, FdUMP, competes with dUMP for the active binding site on the TS enzyme. FdUMP forms a ternary complex with TS and 5,10-methylenetetrahydrofolate, thereby inhibiting the enzyme.

Monoclonal Mouse Anti-Human
**Thyroglobulin**

Clone: DAK-Tg6
Isotype: IgG1, kappa

● Frozen ● Formalin

| | | | |
|---|---|---|---|
| IVD | M0781 | Culture supernatant | 1 mL |

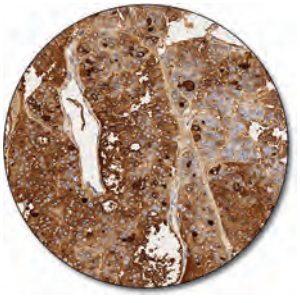
Reacts with cells in thyroid tissue. The antibody is a useful aid for classification of thyroid carcinomas.

Polyclonal Rabbit Anti-Human
**Thyroglobulin**

● Frozen ● Formalin

| | | | |
|---|---|---|---|
| IVD | A0251 | Ig fraction | 2 mL |
| IVD | GA509 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR509 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS509 | RTU★, FLEX | 30 tests, 6 mL△ |

Thyroglobulin is the precursor of thyroid hormones. It is synthesized by thyrocytes and transported to the apical surface where it is secreted into the lumen of thyroid follicles and stored as the major component of colloid. The antibody is useful for the detection of thyroglobulin in thyroid tissue and is a useful aid for classification of well-differentiated thyroid carcinomas.



*Thyroid follicular carcinoma (FFPE) stained with FLEX Anti-Thyroglobulin, Code GA509, on Dako Omnis.*



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

Monoclonal Mouse Anti-Human
**Thyroid Peroxidase (TPO)**

Clone: MoAb47
Isotype: IgG1, kappa

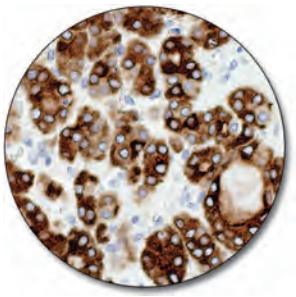
● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7257 Culture supernatant | 0.2 mL |

Thyroid peroxidase (TPO) is present as a dimer on the apical surface of thyroid folliular cells, and it is the primary enzyme involved in thyroid hormone synthesis. A reduction of TPO-positive cells has been found in malignant nodular thyroid tissue, and the antibody is a useful aid for classification of solitary cold thyroid nodules in fine needle aspiration cytology samples (1).

Reference:

1. Christensen L, Blichert-Toft M, Brandt M, Lange M, Sneppen SB, Ravnsbæk J. Thyroperoxidase TPO immunostaining of the solitary cold thyroid nodule. Clin Endocrinol 2000;53:161-9.



*Thyroid adenoma (benign) (FFPE) stained with Anti-TPO, Code M7257.*

Monoclonal Mouse Anti-Human
**Thyroid-Stimulating Hormone (TSH)**

Clone: 0042
Isotype: IgG1, kappa

● Formalin

| | | |
|---|---|---|
| IVD | M3503 Culture supernatant | 1 mL |

Reacts with the β-subunit of thyroid-stimulating hormone. By immunoradiometric assay, no detectable cross-reactivity was found against hGH, prolactin, hCG or bovine TSH. The antibody labels thyrotrophic cells of the pituitary. Results aid in the classification of pituitary adenomas.

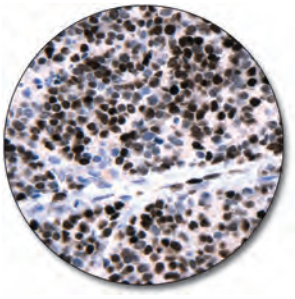
Monoclonal Mouse Anti-
**Thyroid Transcription Factor (TTF-1)**

Clone: 8G7G3/1
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M3575 Culture supernatant | 0.2 mL/1 mL |
| IVD | IR056 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS056 RTU★, FLEX | 30 tests, 6 mL△ |

Identifies the 40 kDa TTF-1 band in nuclear extracts or whole cell lysates of TTF-1-positive cell lines of rat, mouse and man. TTF-1 is selectively expressed in lung and thyroid, and the antibody may aid in the classification of tumors of the lung and thyroid.



*Lung smal cell carcinoma (FFPE) stained with FLEX Anti-TTF-1, Code IR056/IS056.*

Monoclonal Mouse Anti-Human
**Tissue Inhibitor of Metalloproteinases 1**

Clone: VT7
Isotype: IgG1, kappa

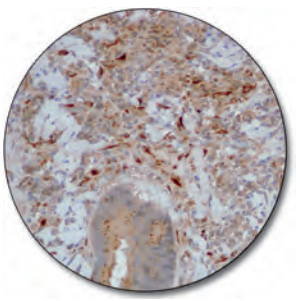
● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7293 Culture supernatant | 0.2 mL |

Reacts with tissue inhibitor of metalloproteinases 1 (TIMP-1). TIMP-1 is expressed in a proportion of stromal myofibroblast-like cells adjacent to invading cancer cells of colon adenocarcinomas. Results aid in the classification of adenocarcinomas and colon adenomas (1). TIMP-1 is also expressed in neuroendocrine cells (2). TIMP-1 plays a pivotal role in extracellular matrix remodeling, and may affect malignant cell transformation, cell proliferation and apoptosis (3).

References:

1. Sørensen IV, Winther H, Foged NT, Fenger C, Brünner N. Tissue inhibitor of metalloproteinases 1 (TIMP-1) as an immunohistochemical marker for colorectal cancer. Eur J Cancer Supplements 2005;3:196.
2. Sørensen IV, Fenger C, Winther H, Foged NT, Lademann U, Brünner N, et al. Characterization of anti-TIMP-1 monoclonal antibodies for immunohistochemical localization in formalin fixed paraffin embedded tissue. J Histochem Cytochem 2006;In press.
3. Fassina G, Ferrari N, Brigati C, Benelli R, Santi L, Noonan DM, et al. Tissue inhibitors of metalloproteases: regulation and biological activities. Clin Exp Metastasis 2000;18:111-20.



*Colon adenocarcinoma (FFPE) stained with Anti-TIMP-1, Code M7293.*

Monoclonal Mouse Anti-Human
**Topoisomerase IIα**

Clone: Ki-S1
Isotype: IgG2a, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M7186 Purified | 1 mL |

The topoisomerase II enzymes control DNA topology by cleaving and rejoining DNA strands and passing other DNA strands through the transient gaps. The topoisomerase IIα isoform is a 170 kDa nuclear protein that is only expressed in proliferating cells.

Monoclonal Mouse Anti-Human
**Tyrosinase**

Clone: T311
Isotype: IgG2a, kappa

● Formalin ● HIER

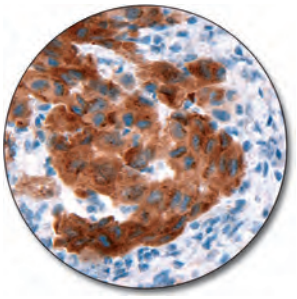
| | | |
|---|---|---|
| IVD | M3623 Culture supernatant | 0.2 mL |
| IVD | IR061 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS061 RTU★, FLEX | 30 tests, 6 mL△ |

Tyrosinase is a copper-glycoenzyme involved in the production of melanin pigments, including both eumelanin and pheomelanin. As a marker of melanocytic lineage, tyrosinase is localized to melanocytes which can be found on the dermal/epidermal junction of normal skin. It is not detected in other normal cells. Results aid in the classification of primary and metastatic malignant melanomas. The cellular localization of tyrosinase is cytoplasmic and/or perinuclear.





▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections



*Melanoma (FFPE) stained with FLEX Anti-Tyrosinase, Code IR061/ IS061.*

Monoclonal Mouse Anti-Human
**uPAR**

Clone: R4
Isotype: IgG1, kappa

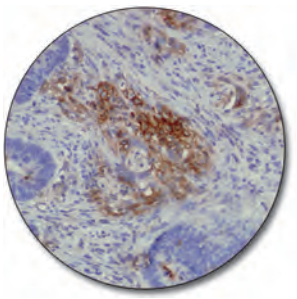
● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M7294 | Culture supernatant | 0.2 mL |

Reacts with urokinase-type plasminogen activator receptor (uPAR), also designated CD87. uPAR is part of the plasminogen activator system, which is involved in both early phases of carcinogenesis as well as cancer invasion and metastasis (1, 2). In normal tissue, the antibody labels a subpopulation of macrophages and neutrophils in tonsil and breast tissue as well as in the lamina propria of the intestine. The antibody labels a subpopulation of tumor-associated stromal macrophages and is a useful aid for classification of invasive colon and breast carcinomas as well neoplastic glands of colon adenocarcinomas.

References:

1. Duffy MJ. The urokinase plasminogen activator system: role in malignancy [review]. Curr Pharm Des 2004;10:39-49.
2. Andreasen PA, Egelund R, Petersen HH. The plasminogen activation system in tumor growth, invasion, and metastasis [review]. Cell Mol Life Sci 2000;57:25-40.



*Colon carcinoma (FFPE) stained with Anti-uPAR, Code M7294.*

Monoclonal Mouse Anti-Human
**Vascular Endothelial Growth Factor (VEGF)**

Clone: VG1
Isotype: IgG1, kappa

● Formalin ● HIER

| | | | |
|---|---|---|---|
| RUO | M7273 | Culture supernatant | 0.2 mL |

Vascular endothelial growth factor (VEGF) is a key regulator of physiological angiogenesis during embryogenesis, skeletal growth and reproductive functions. Of the six different isoforms of VEGF, the antibody labels the VEGF-121, VEGF-165, and VEGF-189 isoforms.

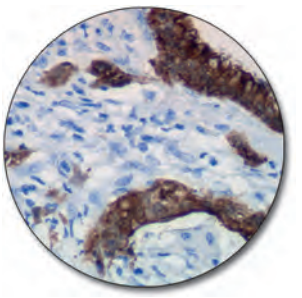
Monoclonal Mouse Anti-
**Villin**

Clone: 1D2 C3
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M3637 | Culture supernatant | 1 mL |
| IVD | IR076 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS076 | RTU★, FLEX | 30 tests, 6 mL△ |

Villin is a 95 kDa calcium-regulated, actin-binding protein that plays a role iin regulating actin filament assembly. It is a major constituent in the microvilli, which compose the brush border of epithelial cells forming absorptive surfaces of the intestinal and renal proximal tubular epithelia. In normal human tissue, villin is expressed by a limited number of simple epithelia of the gastrointestinal and urogenital tract. Antibodies to villin are a useful aid for classification of primary and metastatic colorectal carcinomas.



*Colon adenocarcinoma (FFPE) stained with FLEX Anti-Villin, Code IS076/IS076.*

**Dako FLEX RTU Antibodies for Gastrointestinal Tract Testing**

See our panel of FLEX antibodies at page 65

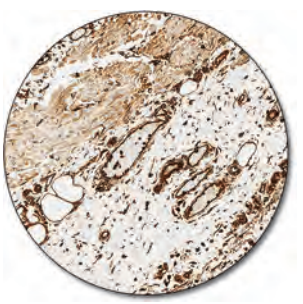
Monoclonal Mouse Anti-
**Vimentin**

Clone: V9
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | | |
|---|---|---|---|
| IVD | M0725 | Culture supernatant | 0.2 mL/1 mL |
| IVD | GA630 | RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR630 | RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS630 | RTU★, FLEX | 30 tests, 6 mL△ |

Vimentin is a 57 kDa intermediate filament protein which forms part of the cytoskeleton of vertebrate cells and is characteristically found in cells of mesenchymal origin. The coexpression of intermediate filaments, particularly vimentin and cytokeratin, has been demonstrated in a variety of normal cells/ tissues and in neoplastic lesions, necessitating the use of antibodies against other types of intermediate filaments. The antibody is a useful aid for classification of neoplastic tissues of mesenchymal origin.



*Bladder wall (FFPE) stained with FLEX Anti-Vimentin, Code GA630, on Dako Omnis.*



◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

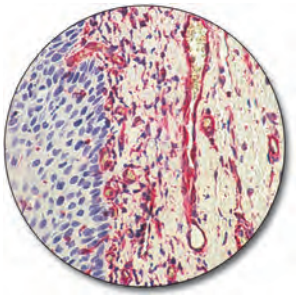
Monoclonal Mouse Anti-
**Vimentin**

Clone: Vim 3B4
Isotype: IgG2a, kappa

● Frozen ● Formalin ● Enzyme/HIER

| | | |
|---|---|---|
| IVD | M7020 Purified | 1 mL |

Reacts strongly with human vimentin and labels cells of mesenchymal origin. This antibody is particularly well-suited for use on formalin-fixed, paraffin-embedded tissue sections. The antibody is a useful aid for classification of tumors of mesenchymal origin.



*Tonsil (FFPE) stained with Anti-Vimentin, Code M7020.*

Monoclonal Mouse Anti-Human
**Von Willebrand Factor**

Clone: F8/86
Isotype: IgG1, kappa

● Frozen ● Formalin ● HIER

| | | |
|---|---|---|
| IVD | M0616 Culture supernatant | 1 mL |

Reacts with von Willebrand factor present in endothelial cells and in the cytoplasm of megakaryocytes. The antibody is a useful aid for classification of tumors derived from megakaryocytes. The former designation for von Willebrand factor was Factor VIII-related antigen.

Polyclonal Rabbit Anti-Human
**Von Willebrand Factor**

● Formalin ● Enzyme/HIER

| | | |
|---|---|---|
| IVD | A0082 Ig fraction | 0.2 mL/2 mL |
| IVD | GA527 RTU★, FLEX | 60 tests, 12 mL◆ |
| IVD | IR527 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS527 RTU★, FLEX | 30 tests, 6 mL△ |

Expression of the von Willebrand factor gene is tissue specific and confined to endothelial cells and megakaryocytes. VWF is present in plasma, in the Weibel-Pallade bodies of endothelial cells, in the alpha-granule in megakaryocytes and platelets derived from them, as well as in the subendothelial matrix of the vessel wall. Results aid in the classification of acute myeloid leukemia FAB type M7, angiosarcoma and epithelioid hemangioendothelioma.

References:


1. Weidner N, Semple JP, Welch WR, Folkman J. Tumor angiogenesis and metastasis - correlation in invasive breast carcinoma. N Engl J Med 1991;324:1-8.
2. Makhlouf HR, Ihsak KD, Goodman ZD. Epithelioid hemangioendothelioma of the liver: a clinicopathologic study of 137 cases. Cancer 1999;85:562-82.


*Angiosarcoma (FFPE) stained with FLEX Anti-Von Willebrand Factor, Code GA527, on Dako Omnis.*

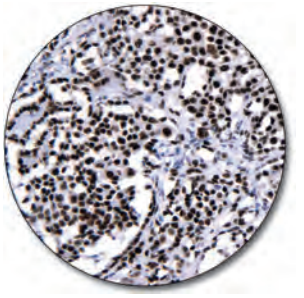
Monoclonal Mouse Anti-Human
**Wilms' Tumor 1 (WT1) Protein**

Clone: 6F-H2
Isotype: IgG1, kappa

● Frozen ● Formalin ● Enzyme

| | | |
|---|---|---|
| IVD | M3561 Culture supernatant | 1 mL |
| IVD | IR055 RTU★, FLEX | 60 tests, 12 mL▲ |
| IVD | IS055 RTU★, FLEX | 30 tests, 6 mL△ |

*WT1* is a gene involved in the induction of Wilms' tumor, a pediatric renal malignancy. Wilms' tumor 1 protein regulates transcription of other genes and can function both as a transcriptional activator and repressor. The antibody reacts with all isoforms of the full-length WT1 and also identifies WT1 lacking exon 2-encoded amino acids. Results aid in the classification of Wilms' tumors, malignant mesotheliomas and acute leukemias.



*Mesothelioma (FFPE) stained with FLEX Anti-Wilms' Tumor 1 (WT1) Protein, Code IR055/IS055.*

**Dako FLEX RTU Antibodies for Soft Tissue/Bones Testing**

See our panel of FLEX antibodies at page 71

Monoclonal Mouse Anti-Human
**ZAP-70****

Clone: 2F3.2
Isotype: IgG2a, kappa

● Frozen ● Formalin ● HIER

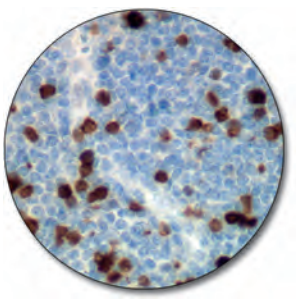
| | | |
|---|---|---|
| IVD | M7303 Culture supernatant | 1 mL |
| IVD | IR653 RTU★, FLEX | 60 tests, 12 mL▲ |

Reacts with ZAP-70 expressed in T cells, natural killer cells, pro/pre B cells but not in normal mature B cells. The antibody is a useful aid for classification of a subset of chronic lymphocytic leukemias (CLL). In CLL, ZAP-70 expression is closely associated with an unmutated configuration of the immunoglobulin heavy-chain variable region ($IgV_H$) genes (1).

** This product is for in vitro diagnostic use only. The product embodies technology described in US Patent 7,329,502 and pending Canadian Patent Application No. 2,413,475.

Reference:


1. Carreras J, Villamor N, Colomo L, Moreno C, Cajal S, Crespo M, et al. Immunohistochemical analysis of ZAP70 expression in B-cell lymphoid neoplasms. J Pathol 2005;205;507-13.

*B-cell chronic lymphocytic leukemia/small lymphocytic lymphoma (FFPE) stained with FLEX Anti-ZAP-70, Code IR653.*

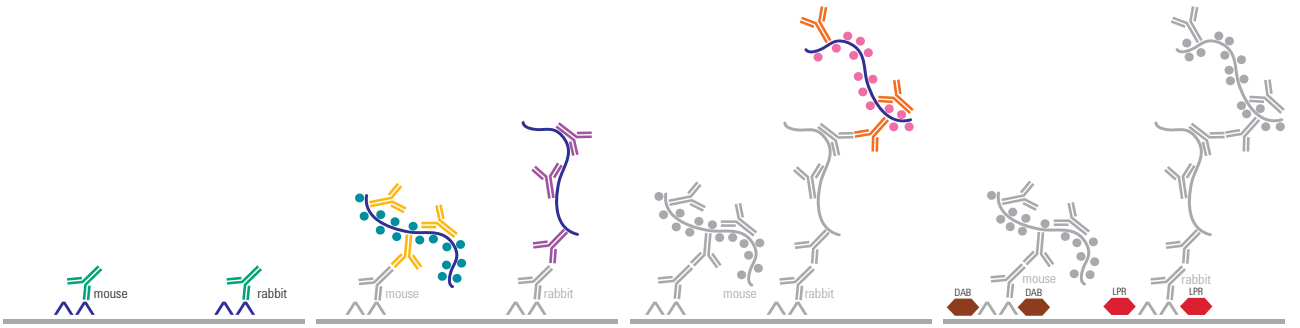
◆ Packaged in vials for use with Dako Omnis
▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments
★ Ready-to-use antibody. To be used with EnVision FLEX or EnVision FLEX+ visualization systems on formalin-fixed, paraffin-embedded tissue sections

# Antibody Cocktails

Ready-to-use, two-color primary antibody cocktails for EnVision DuoFLEX Doublestain System, designed for Autostainer Link Instruments.

When limited tissue is available - and for time savings - it can be relevant to retrieve more information from the same staining. For this reason, Dako has launched a series of ready-to-use antibody cocktails and a complimentary detection system, which will provide a two-color staining on the same tissue section.

These ready-to-use antibody cocktails are designed for optimal performance using EnVision DuoFLEX Doublestain System, Code SK110, and will provide a two-color staining reaction on the same tissue section.




STEP 1 Application of mouse and rabbit primary antibodies.

STEP 2 Application of HRP-conjugated polymers and secondary polymers.

STEP 3 Application of AP-conjugated polymers.

STEP 4 Application of chromogenic substrates: brown DAB and LPR.

DuoFLEX Cocktail

**Anti-AMACR**
**Anti-Cytokeratin HMW**
**Anti-Cytokeratin 5/6**

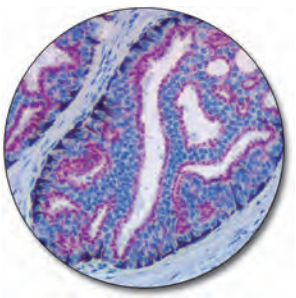
● Formalin ● HIER

IVD IC004 Antibody Cocktail▲ 6 mL

Reacts with antigens corresponding to AMACR, cytokeratin high molecular weight, and cytokeratin 5/6 on formalin-fixed, paraffin-embedded tissue sections. This antibody cocktail of Monoclonal Rabbit Anti-Human AMACR, Clone 13H4, Monoclonal Mouse Anti-Human Cytokeratin, High Molecular Weight, Clone 34βE12, and Monoclonal Mouse Anti-Human Cytokeratin 5/6, Clone D5/16 B4, can be used for classification of prostatic carcinoma, prostatic intraepithelial neoplasia, and its benign mimic lesions (1) after the primary diagnosis is made by morphological examination of H&E stained slides. This antibody cocktail should be visualized using EnVision DuoFLEX Doublestain System, Code SK110.

Reference:

1. Martens MB, Keller JH. Routine immunohistochemical staining for high-molecular weight cytokeratin 34-beta and alpha-methylacyl CoA racemase (P504S) in postirradiation prostate biopsies. Mod Pathol 2006;19:287-290.



*Prostate (FFPE) stained with DuoFLEX Cocktail Anti-AMACR + Anti-Cytokeratin HMW + Anti-Cytokeratin 5/6, Code IC004.*

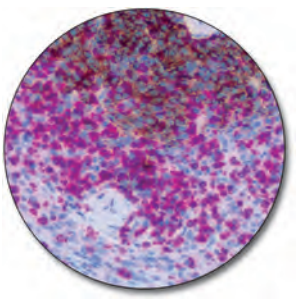
DuoFLEX Cocktail

**Anti-CD3**
**Anti-CD20cy**

● Formalin ● HIER

IVD IC002 Antibody Cocktail▲ 6 mL

Reacts with antigens corresponding to CD3 and CD20cy on formalin-fixed, paraffin-embedded tissue sections. Polyclonal Rabbit Anti-Human CD3 is useful for the identification of T cells and classification of related neoplasms. Monoclonal Mouse Anti-Human CD20cy, Clone L26, labels cells of the B-cell lineage, and is useful for the classification of neoplasms of B-cell derivation. This antibody cocktail should be visualized using EnVision DuoFLEX Doublestain System, Code SK110.



*B-cell lymphoma (FFPE) stained with DuoFLEX Cocktail Anti-CD3 + Anti-CD20cy, Code IC002.*

▲ Packaged in vials for use with Autostainer Link instruments

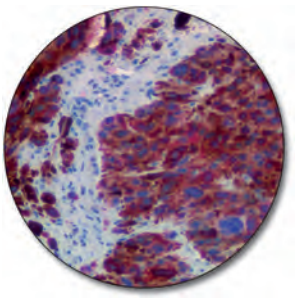
DuoFLEX Cocktail

**Anti-S100**
**Anti-Tyrosinase**
**Anti-Melan-A**

● Formalin ● HIER

IVD IC001 Antibody Cocktail▲ 6 mL

Reacts with antigens corresponding to S100, tyrosinase, and melan-A on formalin-fixed, paraffin-embedded tissue sections. Polyclonal Rabbit Anti-S100 is useful for the classification of S100-positive neoplasms, such as malignant melanoma and Langerhans' histiocytosis. Monoclonal Mouse Anti-Human Tyrosinase, Clone T311, is useful for the classification of melanocytic lesions and melanoma. Monoclonal Mouse Anti-Human Melan-A, Clone A103, is useful for the classification of melanomas and is also applicable for angiomyolipomas. This antibody cocktail should be visualized using EnVision DuoFLEX Doublestain System, Code SK110.



*Melanoma (FFPE) stained with DuoFLEX Cocktail Anti-S100 + Anti-Tyrosinase + Anti-Melan-A, Code IC001.*





▲ Packaged in vials for use with Autostainer Link instruments

# Multipurpose Antibodies

Owing to their high specificity and precipitating ability, a number of primary antibodies, notably polyclonal antibodies, are well-suited for a variety of applications. This section presents these antibodies, and lists the techniques for which they have been tested and proven useful.

Polyclonal Rabbit Anti-Human

**Alpha-1-Fetoprotein**

● Precipitation ● ELISA ● IHC

| | | | |
|---|---|---|---|
| IVD | A0008 | Ig fraction | 0.2 mL |

A0008 can be used for detection of alpha-1-fetoprotein in human sera by enzyme-immunoassays (1). A0008 is also a valuable reagent for immunohistochemistry (2).

References:


1. MacDonal DJ, Kelly AM. The rapid quantitation of serum alpha-fetoprotein by two-site micro enzyme immunoassay. Clin Chim Acta 1978;87:367-72.
2. Jacobsen GK, Jacobsen M, Clausen PP. Distribution of tumor-associated antigens in the various histiologic components of germ cell tumors of the testis. Am J Surg Pathol 1981;5:257-66.


Polyclonal Rabbit Anti-

**Escherichia Coli**

● Precipitation ● Blot

| | | | |
|---|---|---|---|
| IVD | B0357 | Ig fraction | 2 mL |

An aqueous extract of a sonicate of *E. coli* (non-transformed strain K12 C600) has been used for immunization. B0357 reacts with at least 80 different *E. coli* antigens in crossed immunoelectrophoresis, and also reveals a multitude of *E. coli* antigens in immunoblotting from SDS polyacrylamide gel electrophoresis. Broad reactivity with *E. coli* proteins (strains C600, HB101 and chi 1776 have been tested) makes B0357 particularly well-suited for monitoring the purification of proteins made in *E. coli* by genetic engineering.

Polyclonal Rabbit Anti-Human

**Fibrinogen**

● Precipitation ● IHC

| | | | |
|---|---|---|---|
| IVD | F0111 | FITC. Ig fraction | 2 mL |

F0111 reacts with fibrinogen, fibrin and the fibrinogen fragments D and E.

Polyclonal Rabbit Anti-

**Glial Fibrillary Acidic Protein (GFAP)**

● Precipitation ● IHC

| | | | |
|---|---|---|---|
| IVD | Z0334 | Ig fraction | 0.2 mL/1 mL |

GFAP isolated from bovine spinal cord has been used for immunization. Z0334 reacts strongly with human GFAP and with GFAP in many animal species tested: cat, cow, dog, mouse, rat and sheep.
In the central nervous system Z0334 labels astrocytes and some groups of ependymal cells. In the peripheral nervous system Schwann's cells, satellite cells and enteric glial cells are labeled. Negative labeling is found in skin, connective tissue, lymphatic tissue, muscle, gastrointestinal tract, including liver and pancreas, kidney, ureter and bladder.
Z0334 is useful particularly for distinguishing cells of astrocytic origin in the central nervous system. The antibody can be used on frozen and formalin-fixed, paraffin-embedded tissue sections.

Polyclonal Rabbit Anti-Human

**IgA, Specific for Alpha-Chains**

● Blot ● ELISA ● IHC

| | | | |
|---|---|---|---|
| IVD | A0262 | Ig fraction | 1 mL |
| IVD | F0204 | FITC. Ig fraction | 2 mL |

For use in methods demanding a very high specificity. The specificity and performance of the antibody have been ascertained in immunohistochemistry and ELISA. Additionally, the specificity has been tested by crossed immunoelectrophoresis using 12.5 microlitre antibody per square cm gel area against 2 microlitre human plasma. The antigen used for immunization is serum IgA.

Polyclonal Rabbit Anti-Human

**IgA, IgG, IgM, Kappa, Lambda**

● ELISA ● IHC

| | | | |
|---|---|---|---|
| IVD | F0200 | FITC. Ig fraction | 2 mL |
| IVD | P0212 | HRP. Ig fraction | 2 mL |

F0200 is very well-suited for the flourescent treponemal antibody (FTA) test and for the demonstration of anti-nuclear antibodies (ANA) as well as other human autoantibodies, no matter what the immunoglobulin class may be. P0212 has found a wide application in ELISA for the detection of human antibodies.

Polyclonal Rabbit Anti-Human

**IgG, Specific for Gamma-Chains**

● Blot ● ELISA ● IHC

| | | | |
|---|---|---|---|
| IVD | A0423 | Ig fraction | 1 mL |
| IVD | D0336 | AP. Affinity isolated | 1 mL |
| IVD | F0202 | FITC. Ig fraction | 2 mL |
| IVD | F0315 | FITC. $F(ab')_2$ | 1 mL |
| IVD | P0214 | HRP. Ig fraction | 2 mL |

For use in methods demanding a very high specificity. The specificity and performance of the antibody have been ascertained in immunohistochemistry and ELISA. Additionally, the specificity has been tested by crossed immunoelectrophoresis using 12.5 microlitre antibody per square cm gel area against 2 microlitre human plasma.
The $F(ab')_2$ fragment antibody is particularly useful for labeling unfixed blood cells containing active Fc receptors, and for other applications where the Fc part of the antibody molecule could disturb.
Please note that $F(ab')_2$ fragment antibodies are not suited for techniques dependant on aggregation or precipitation of antigen-antibody complexes.

Polyclonal Rabbit Anti-Human

**IgM, Specific for Mu-Chains**

● Blot ● ELISA ● IHC

| | | | |
|---|---|---|---|
| IVD | A0425 | Ig fraction | 1 mL |
| IVD | F0203 | FITC. Ig fraction | 2 mL |
| IVD | P0215 | HRP. Ig fraction | 2 mL |

For use in methods demanding a very high specificity. The specificity and performance of the antibody have been ascertained in immunohistochemistry and ELISA. Additionally, the specificity has been tested by crossed immunoelectrophoresis using 12.5 microlitre antibody per square cm gel area against 2 microlitre human plasma.

Polyclonal Rabbit Anti-Human

**Kappa Light Chains**

● Precipitation ● Blot ● ELISA ● IHC

| | | | |
|---|---|---|---|
| IVD | A0191 | Ig fraction | 2 mL |
| IVD | F0198 | FITC. Ig fraction | 2 mL |

These reagents have been produced in a manner that ensures a particularly wide specificity for kappa-chains. The specificity is directed against surface as well as hidden determinants and has been ascertained by gel precipitation techniques and immunohistochemistry.
A0191 is excellent for the typing of free and bound monoclonal kappa-chains by immunoelectrophoresis and immunofixation.

Polyclonal Rabbit Anti-Human

**Lambda Light Chains**

● Precipitation ● Blot ● ELISA ● IHC

| | | | |
|---|---|---|---|
| IVD | A0193 | Ig fraction | 2 mL |
| IVD | F0199 | FITC. Ig fraction | 2 mL |

The antigen used for immunization is a pool of human lambda Bence Jones proteins. Therefore, a reagent with a particularly wide specificity for lambda-chains is obtained. The specificity is directed against surface as well as hidden determinants and has been ascertained by gel precipitation techniques and immunohistochemistry.
A0193 is excellent for the typing of free and bound monoclonal lambda-chains by immunoelectrophoresis and immunofixation.

Polyclonal Rabbit Anti-Human

**Lysozyme EC 3.2.1.17**

● Precipitation ● Blot ● IHC

| | | | |
|---|---|---|---|
| IVD | A0099 | Ig fraction | 2 mL |

A0099 is a valuable tool for identification of histiocytic neoplasias and myeloid leukemias (1, 2).
Lysozyme in undiluted serum and urine can be quantitated by rocket immunoelectrophoresis (3). The buffer used for dilution of the standards should contain 1% bovine albumin, as lysozyme is unstable in protein-poor solutions. Please see reference 4 for the use of A0099 in immunoblotting.

References:


1. Meister P, Huhn D, Nathrath W. Malignant histiocytosis. Immunocytochemical characterization on paraffin-embedded tissue. Virchows Arch A Path Anat Histol 1980;385:233-46.
2. Krugliak L, Meyer PR, Taylor CR. The distribution of lysozyme, alpha-1-antitrypsin, and alpha-1-antichymotrypsin in normal hematopoietic cells and in myeloid leukaemias. Am J Hematol 1986;21:99-109.
3. Johansson BG, Malmquist J. Quantitative immunochemical determination of lysozyme (muramidase) in serum and urine. Scand J Clin Lab Invest 1971;27:255-61.
4. Mörsky P. Detection of lysozyme and alpha-2-macroglobulin-lysozyme complexes by immunoblotting. Clin Chim Acta 1988;178:327-36.


Polyclonal Rabbit Anti-Human

**Thyroglobulin**

● Precipitation ● IHC

| | | | |
|---|---|---|---|
| IVD | A0251 | Ig fraction | 2 mL |

The antigen used for the production of A0251 has beeen isolated from normal human thyroids. The antibody has been made specific for thyroglobulin by absorption with insolubilized human serum.

# Secondary Antibodies

Secondary antibodies (antibodies to animal immunoglobulins) are utilized either for the direct detection of animal immunoglobulins or for amplification of the reaction between a primary antibody and the target antigen. Secondary antibodies play an important role in immunohistochemical procedures, immunoblotting, ELISAs and a number of other immunological methods. All Dako secondary antibodies and their conjugates are carefully tested to ensure good performance and low lot-to-lot variation. Several Dako secondary antibodies are presented in different grades regarding antiserum purification (immunoglobulin fraction of antiserum, affinity-isolated antibody, $F(ab')_2$ fragment antibody) and also regarding the absorptions which have been performed to remove interspecies cross-reactions.

**Further Information**
A package insert with detailed product description and guidelines for dilutions accompanies all Dako secondary antibodies.

Polyclonal Rabbit Anti-
**Goat Immunoglobulins**

| | | | |
|---|---|---|---|
| IVD | F0250 | FITC. Ig fraction | 2 mL |
| IVD | P0160 | HRP. Ig fraction | 2 mL |

The antibody has not been absorbed to remove cross-reactions with immunoglobulins from other species, therefore it shows a particularly strong reaction with its corresponding antigen. F0250 and P0160 are very good for indirect immunohistochemical techniques. Additionally, P0160 works well in ELISA and immunoblotting.

Polyclonal Rabbit Anti-
**Goat Immunoglobulins**

| | | | |
|---|---|---|---|
| IVD | E0466 | Biotin. Affinity isolated | 1 mL |
| IVD | P0449 | HRP. Affinity isolated | 1 mL |

Cross-reaction with human immunoglobulins has been removed by solid-phase absorption. The antibody may cross-react with immunoglobulins from other species. Due to a particularly strong cross-reaction with sheep immunoglobulins, E0466 serves as an excellent link antibody with sheep primary antibodies.
E0466 and P0449 are well-suited for immunohistochemistry, ELISA and immunoblotting.

Polyclonal Rabbit Anti-
**Guinea Pig Immunoglobulins**

| | | | |
|---|---|---|---|
| IVD | P0141 | HRP. Ig fraction | 2 mL |

The antibody has not been absorbed to remove cross-reactions with immunoglobulins from other species, therefore it shows a particularly strong reaction with its corresponding antigen. P0141 is well-suited for immunohistochemistry, ELISA and immunoblotting.

Polyclonal Goat Anti-
**Mouse Immunoglobulins**

| | | | |
|---|---|---|---|
| IVD | Z0420 | Affinity isolated | 1 mL |
| IVD | D0486 | AP. Affinity isolated | 2 mL |
| IVD | E0433 | Biotin. Affinity isolated | 1 mL |
| IVD | P0447 | HRP. Affinity isolated | 1 mL |

Cross-reaction with human immunoglobulins and fetal calf serum has been removed by solid-phase absorption. The antibody may cross-react with immunoglobulins from other species. However, it should be noted that the cross-reaction with rabbit immunoglobulins is very low. Therefore, the reagents are particularly well-suited for double labeling techniques when the two primary antibodies are from mouse and rabbit, respectively.
Main applications are immunohistochemistry, ELISA and immunoblotting.

Polyclonal Rabbit Anti-
**Mouse Immunoglobulins**

| | | | |
|---|---|---|---|
| | F0232 | FITC. Ig fraction | 2 mL |
| IVD | P0161 | HRP. Ig fraction | 2 mL |

The antibody has not been absorbed to remove cross-reactions with immunoglobulins from other species, therefore it shows a particularly strong reaction with its corresponding antigen. Cross-reaction with human and cow immunoglobulins is pronounced.
Main applications are as follows: *Immunohistochemistry*: F0232 and P0161. *ELISA and immunoblotting*: P0161.
When cross-reaction with human and rat immunoglobulins and fetal calf serum disturbs, we recommend the use of one of Dako's preabsorbed antibodies to mouse immunoglobulins.

Polyclonal Rabbit Anti-
**Mouse Immunoglobulins**

| | | | |
|---|---|---|---|
| IVD | Z0259 | Ig fraction | 2 mL |
| IVD | D0314 | AP. Affinity isolated | 2 mL |
| IVD | E0354 | Biotin. Affinity isolated | 1 mL |
| IVD | E0413 | Biotin. Affinity-isolated $F(ab')_2$ | 1 mL |
| IVD | F0261 | FITC. Ig fraction | 2 mL |
| IVD | P0260 | HRP. Ig fraction | 2 mL |

Cross-reaction with human immunoglobulins and fetal calf serum has been removed by solid-phase absorption. The reagents may cross-react with immunoglobulins from other species.
Main applications are as follows: *Immunohistochemistry*: Z0259, D0314, E0354, E0413, F0261 and P0260. Please note that E0413 should be preferred to E0354 for the staining of blood cells and for other applications where the Fc part of the antibody could disturb. *ELISA and immunoblotting:* Z0259, D0314, E0354, E0413 and P0260. P0260 is particularly well-suited for the demonstration of monoclonal antibodies in ELISA.

Polyclonal Goat Anti-
**Rabbit Immunoglobulins**

| | | | |
|---|---|---|---|
| IVD | D0487 | AP. Affinity isolated | 1 mL |
| | E0432 | Biotin. Affinity isolated | 1 mL |
| IVD | P0448 | HRP. Affinity isolated | 1 mL |

Cross-reaction with human immunoglobulins and fetal calf serum has been removed by solid-phase absorption. The antibody may cross-react with immunoglobulins from other species. All reagents are well-suited for immunohistochemistry, ELISA and immunoblotting.

Monoclonal Mouse Anti-
**Rabbit Immunoglobulins**
Clone: MR12/53
Isotype: IgG1, kappa

| | | | |
|---|---|---|---|
| IVD | M0737 | Culture supernatant | 1 mL |

Is intended as a second stage reagent to be used when labeling tissue or cell samples with rabbit primary antibodies.

Polyclonal Swine Anti-
**Rabbit Immunoglobulins**

| | | | |
|---|---|---|---|
| IVD | Z0196 | Ig fraction | 2 mL |
| IVD | D0306 | AP. Affinity isolated | 1 mL |
| IVD | E0353 | Biotin. Affinity isolated | 1 mL |
| IVD | E0431 | Biotin. Affinity-isolated $F(ab')_2$ | 1 mL |
| IVD | F0205 | FITC. Affinity isolated | 2 mL |
| IVD | P0217 | HRP. Ig fraction | 2 mL |
| IVD | P0399 | HRP. Affinity isolated | 1 mL |

Cross-reaction with human immunoglobulins has been removed by solid-phase absorption. The antibody may cross-react with immunoglobulins from other species.
All reagents are well-suited for immunohistochemical techniques although E0431 should be preferred to E0353 for staining of blood cells and for other applications, where the Fc part of the antibody could disturb. Z0196 is also widely used as secondary antibody in radioimmunoassays. In addition, Z0196, D0306, E0353, E0431, P0217 and P0399 are valuable reagents for ELISA and immunoblotting.

Polyclonal Rabbit Anti-
**Rat Immunoglobulins**

| | | | |
|---|---|---|---|
| | P0450 | HRP. Ig fraction | 1 mL |

Cross-reaction with human immunoglobulins and fetal calf serum has been removed by solid-phase absorption. The antibody may cross-react with immunoglobulins from other species. P0450 is well-suited for immunohistochemistry, ELISA and immunoblotting.

Polyclonal Rabbit Anti-
**Sheep Immunoglobulins**

| | | | |
|---|---|---|---|
| IVD | P0163 | HRP. Ig fraction | 2 mL |

The antibody has not been absorbed to remove cross-reactions with immunoglobulins from other species, therefore it shows a particularly strong reaction with its corresponding antigen. P0163 is well-suited for immunohistochemistry, ELISA and immunoblotting.

# Control Reagents

The normal animal sera and animal immunoglobulins listed are well-suited as qualitative negative controls for Dako antibodies. The products are in liquid form and contain an antimicrobial agent.

Negative controls should always be diluted to match the concentration of the corresponding antibody. Negative controls for EnVision FLEX ready-to-use antibodies are also listed here.

**Goat Serum (Normal)**
RUO X0907 Whole serum 10 mL

**Mouse IgG1**
IVD X0931 Culture supernatant 1 mL
X0931 is a cell culture supernatant containing monoclonal mouse IgG1 antibody to *Aspergillus niger* glucose oxidase, an enzyme which is neither present nor inducible in mammalian tissues. X0931 is well-suited as a negative control in all techniques utilizing monoclonal mouse antibodies of isotype IgG1.

**Mouse IgG2a**
IVD X0943 Culture supernatant 1 mL
X0943 is a cell culture supernatant containing monoclonal mouse IgG2a antibody to *Aspergillus niger* glucose oxidase, an enzyme which is neither present nor inducible in mammalian tissues. X0943 is well-suited as a negative control in all techniques utilizing monoclonal mouse antibodies of isotype IgG2a.

**Mouse IgG2b**
IVD X0944 Culture supernatant 1 mL
X0944 is a cell culture supernatant containing monoclonal mouse IgG2b antibody to *Aspergillus niger* glucose oxidase, an enzyme which is neither present nor inducible in mammalian tissues. X0944 is well-suited as a negative control in all techniques utilizing monoclonal mouse antibodies of isotype IgG2b.

**Mouse IgM**
IVD X0942 Culture supernatant 1 mL
X0942 is a cell culture supernatant containing monoclonal mouse IgM antibody to *Aspergillus niger* glucose oxidase, an enzyme which is neither present nor inducible in mammalian tissues. X0942 is well-suited as a negative control in all techniques utilizing monoclonal mouse antibodies of isotype IgM.

**Rabbit Immunoglobulin Fraction (Normal)**
RUO X0903 Ig fraction 2 mL/10 mL
This product has been prepared from sera of non-immunized rabbits. The immunoglobulin fraction has been isolated in the same way as the immunoglobulin fraction of Dako rabbit antibodies. The protein concentration of X0903 is 20 g/L.

**Rabbit Immunoglobulin Fraction (Solid-Phase Absorbed)**
IVD X0936 Ig fraction 2 mL
This product has been prepared from sera of non-immunized rabbits. The immunoglobulin fraction has been isolated in the same way as the immunoglobulin fraction of Dako rabbit antibodies. In addition, the product has been passed through a column containing immobilized human plasma proteins. This reduces the non-specific background and makes X0936 particularly well-suited as a negative control for Dako solid-phase absorbed rabbit antibodies. Especially when the primary antibody is used for immunohistochemistry at a relatively high concentration, above 0.1 g/L, X0936 should be preferred to Dako Rabbit Immunoglobulin Fraction (Normal), Code X0903. The protein concentration of X0936 is 15 g/L.

**Rabbit Serum (Normal)**
RUO X0902 Whole serum 10 mL

**Swine Serum (Normal)**
RUO X0901 Whole serum 10 mL
Especially for use in immunohistological techniques. Normal swine serum diluted 1:20 might reduce non-specific adsorption of antibodies to tissue, e.g. in the PAP technique.

**Universal Negative Control for GA-Series Mouse Primary Antibodies**
IVD GA750 Ready-to-use 120 tests, 24 mL
Universal negative control for all FLEX ready-to-use **mouse** primary antibodies for use on the Dako Omnis instrument. Packaged in vials for Dako Omnis.

**Universal Negative Control for GA-Series Rabbit Primary Antibodies**
IVD GA600 Ready-to-use 120 tests, 24 mL
Universal negative control for all FLEX ready-to-use **rabbit** primary antibodies for use on the Dako Omnis instrument. Packaged in vials for Dako Omnis.

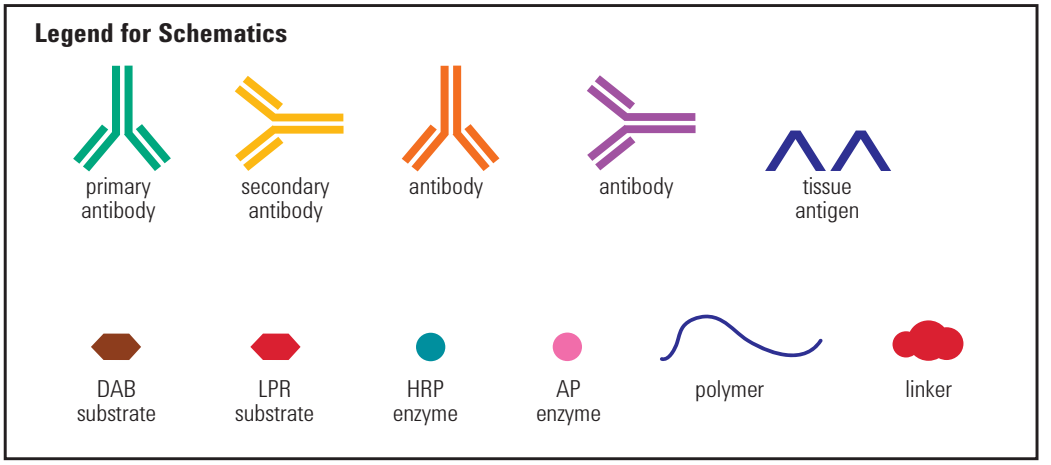
**Universal Negative Control for IR-Series Mouse Primary Antibodies**
IVD IR750 Ready-to-use 120 tests, 24 mL
Universal negative control for all FLEX ready-to-use **mouse** primary antibodies for use on Automated Link Platforms. Packaged in Universal Vial.

**Universal Negative Control for IR-Series Rabbit Primary Antibodies**
IVD IR600 Ready-to-use 120 tests, 24 mL
Universal negative control for all FLEX ready-to-use **rabbit** primary antibodies for use on Automated Link Platforms. Packaged in Universal Vial.

**Universal Negative Control for IS-Series Mouse Primary Antibodies**
IVD IS750 Ready-to-use 60 tests, 12 mL
Universal negative control for all FLEX ready-to-use **mouse** primary antibodies for use on Dako Autostainer Instruments. Packaged in Dako Autostainer Vial.

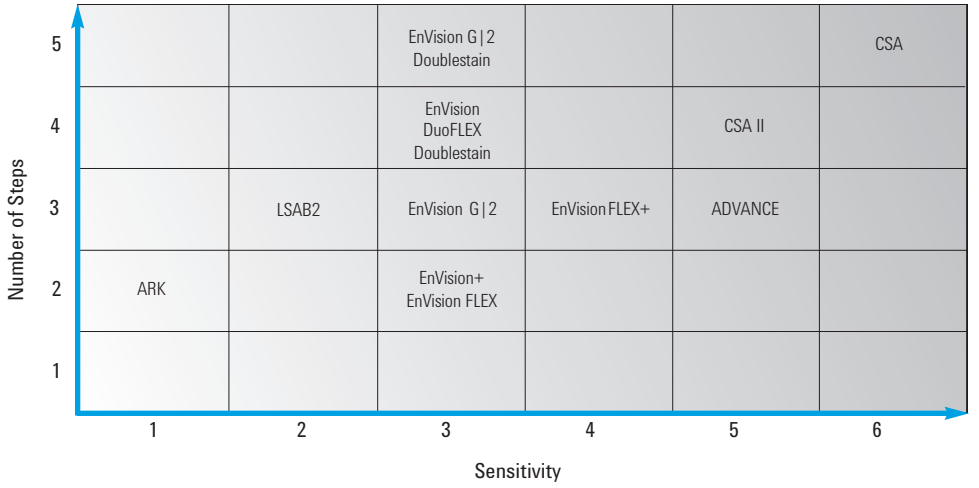
**Universal Negative Control for IS-Series Rabbit Primary Antibodies**
IVD IS600 Ready-to-use 60 tests, 12 mL
Universal negative control to all FLEX ready-to-use **rabbit** primary antibodies for use on Dako Autostainer Instruments. Packaged in Dako Autostainer Vial.

# Visualization Systems



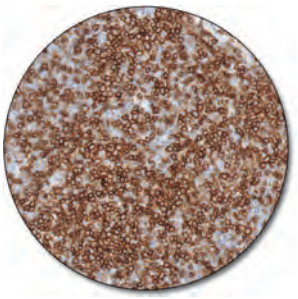
# Overview of Dako Visualization Systems

### Complexity Versus Sensitivity of Dako Visualization Systems




### Comparative Features of Dako Visualization Systems

| Product Name | No. of Steps | Primary Antibody | Primary Antibody | Enzyme Label | Technology |
|---|---|---|---|---|---|
| EnVision FLEX | 2 | Concentrate or FLEX RTU | Mouse + Rabbit | HRP | Dextran (Biotin-Free) |
| EnVision FLEX+ | 3 | Concentrate or FLEX RTU | Mouse + Rabbit | HRP | Dextran (Biotin-Free) |
| EnVision+ | 2 | Concentrate | Mouse and/or Rabbit | HRP | Dextran (Biotin-Free) |
| EnVision DuoFLEX Doublestain | 4 | Cocktail or Concentrate | Mouse + Rabbit | AP and HRP | Dextran (Biotin-Free) |
| EnVision G | 2 | 3 | Concentrate or RTU | Mouse + Rabbit | AP | Dextran (Biotin-Free) |
| EnVision G | 2 Doublestain | 5 | Concentrate or RTU | Mouse + Rabbit | AP and HRP | Dextran (Biotin-Free) |
| ADVANCE | 3 | Concentrate or RTU | Mouse + Rabbit | HRP | Dextran (Biotin-Free) |
| ARK | 2 | Concentrate | Mouse | HRP | Labeled Streptavidin-Biotin |
| CSA | 5 | Concentrate | Mouse or Rabbit | HRP | Tyramide |
| CSA II | 4 | Concentrate | Mouse or Rabbit | HRP | Tyramide (Biotin-Free) |
| LSAB 2 | 3 | Concentrate or RTU | Mouse + Rabbit | HRP | Labeled Streptavidin-Biotin |



*Chronic lymphocytic leukemia/small lymphocytic lymphoma (FFPE) stained with FLEX Anti-CD23, Code GA781, on Dako Omnis.*


*Our FLEX Ready-to-Use antibodies are optimized for the FLEX/FLEX+ visualization systems. Simply pick one of the convenience kits and add any of the optional reagents and you have a powerful IHC visualization solution that is ready to take on the diagnostic and workflow challenges in today's pathology laboratory.*

# Overview of EnVision FLEX and FLEX+ Visualization Systems

Achieve highly reliable and reproducible results without sacrificing quality or flexibility. EnVision FLEX and FLEX+ Visualization Systems give you high-quality reagents, packaged in kit configurations that are easy to choose and use.

## Dako Omnis

| | EnVision FLEX Systems | | | |
|---|---|---|---|---|
| | FLEX<br>High pH | FLEX<br>Low pH | FLEX+<br>High pH | FLEX+<br>Low pH |
| Code | GV800<br>or<br>GV823 | GV800 + GV805 (Low pH TRS)<br>or<br>GV823 + GV805 (Low pH TRS) | GV800 + GV821 (Mouse LINKER)<br>or<br>GV800 + GV809 (Rabbit LINKER) | GV800 + GV805 + GV821<br>or<br>GV800 + GV805 + GV809 |

## Autostainer Link 48

| | EnVision FLEX Systems | | | |
|---|---|---|---|---|
| | FLEX<br>High pH | FLEX<br>Low pH | FLEX+<br>High pH | FLEX+<br>Low pH |
| Code | K8000<br>or<br>K8023 | K8000 + K8005 (Low pH TRS)<br>or<br>K8023 + K8005 (Low pH TRS) | K8002 (incl. Mouse LINKER)<br>or<br>K8002 + K8009 (Rabbit LINKER) | K8002 + K8005<br>or<br>K8002 + K8005 + K8009 |

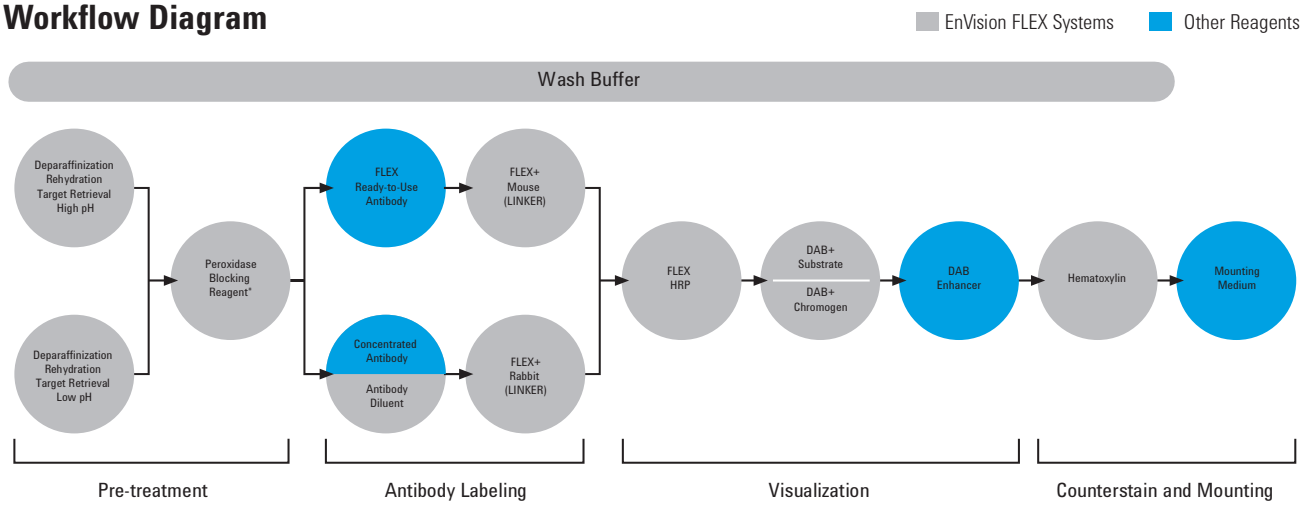
## Dako Autostainer/Autostainer Plus

| | EnVision FLEX Systems | | | |
|---|---|---|---|---|
| | FLEX<br>High pH | FLEX<br>Low pH | FLEX+<br>High pH | FLEX+<br>Low pH |
| Code | K8010<br>or<br>K8024 | K8010 + K8005<br>or<br>K8024 + K8005 | K8012 (incl. Mouse LINKER)<br>or<br>K8012 + K8009 (Rabbit LINKER) | K8012 (incl. Mouse LINKER) + K8005<br>or<br>K8012 + K8005 + K8009 (Rabbit LINKER) |

## Single Reagents for EnVision FLEX Systems

| | EnVision FLEX Systems | | |
|---|---|---|---|
| | Dako Omnis | Autostainer Link 48 | Dako Autostainer/Autostainer Plus |
| Products | Mouse LINKER<br>(Code GV821) | Mouse LINKER<br>(Code K8021) | Mouse LINKER<br>(Code K8022) |
| | Rabbit LINKER<br>(Code GV809) | Rabbit LINKER<br>(Code K8009) | Rabbit LINKER<br>(Code K8019) |
| | Hematoxylin<br>(Code GC808) | Hematoxylin<br>(Code K8008) | Hematoxylin<br>(Code K8018) |
| | Target Retrieval Solution,<br>High pH, 50x (Code GV804) | Target Retrieval Solution,<br>High pH, 50x (Code K8004) | Target Retrieval Solution,<br>High pH, 50x (Code K8004) |
| | Target Retrieval Solution,<br>Low pH, 50x (Code GV805) | Target Retrieval Solution,<br>Low pH, 50x (Code K8005) | Target Retrieval Solution,<br>Low pH, 50x (Code K8005) |
| | Wash Buffer, 20x<br>(Code GC807) | Wash Buffer, 20x<br>(Code K8007) | Wash Buffer, 20x<br>(Code K8007) |
| | Antibody Diluent<br>(Code K8006) | Antibody Diluent<br>(Code K8006) | Antibody Diluent<br>(Code K8006) |
| | DAB+ Substrate Chromogen<br>System (Code GV825) | | |

# Workflow Diagram




** Onboard Dako Omnis, the blocking step is performed after primary antibody incubation.*

**Possibilities**

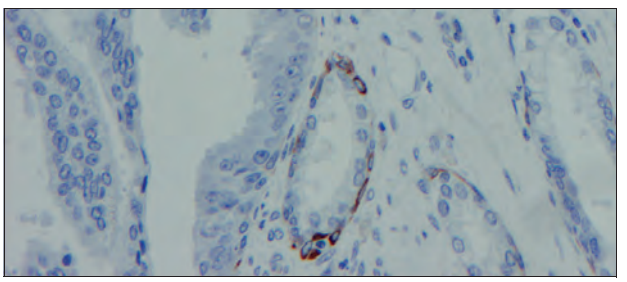
- Sensitivity options for both high sensitivity staining with EnVision FLEX and very-high sensitivity staining with EnVision FLEX+
- Kit components and reagent options create a complete and high quality IHC Solution built upon the proven performance of Dako's EnVision visualization technology platform
- One code number orders the majority of reagents needed to complete a visualization run which ensures that reagents are optimized for use together

**Benefits**

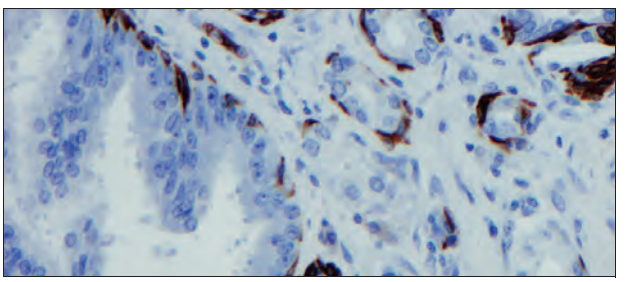
- Offers an integrated solution
- Consistent and documented pre-treatment process
- Reliable, quality reagents with protocols created to optimize laboratory efficiency
- Link software data management capabilities combined with predetermined number of tests for all FLEX kits and options frees personnel from reagent inventory tracking and eliminates excess reagent waste

**EnVision FLEX. High pH and Low pH Stains:**

Anti-Cytokeratin 5/6, Clone D5/16 B4 (Code M7237) labeling basal cells in prostate gland.



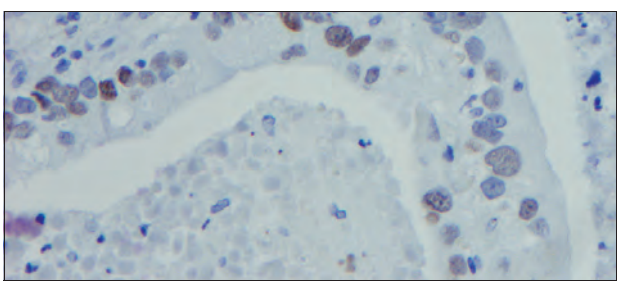
*EnVision FLEX with Low pH, 1:25 Ab dilution.*



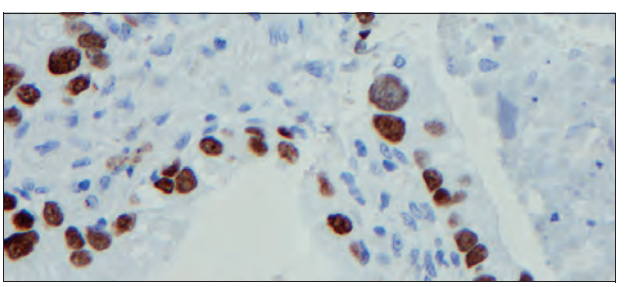
*EnVision FLEX with High pH, 1:25 Ab dilution. Notice the increased staining intensity using high pH pre-treatment.*

**EnVision FLEX and FLEX+. High and Very-High-Sensitivity Stains:**

Anti-TTF-1, Clone 8G7G3/1 (Code M3575) labeling lung adenocarcinoma.



*EnVision FLEX with High pH, 1:75 Ab dilution.*



*EnVision FLEX+ with High pH, 1:75 Ab dilution. Notice the increased staining intensity using EnVision FLEX+.*

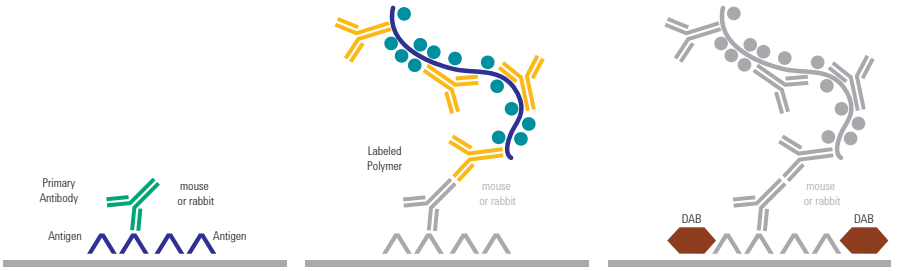
# EnVision FLEX Systems

EnVision FLEX and FLEX+ Visualization Systems gives you high-quality reagents packaged in easy-to-choose-and-use kit configurations. Simply pick one of the Convenience Kits, add any of the optional reagents, and you have an IHC visualization solution that satisfies the modern pathology laboratory's complex diagnostic needs.

EnVision FLEX Systems are simple, two-step visualization systems of high sensitivity. The FLEX+ kits have even greater sensitivity. They are all based on a unique enzyme-conjugated polymer backbone, which, in addition, also carries secondary antibody molecules. Endogenous biotin will not affect EnVision FLEX staining results.

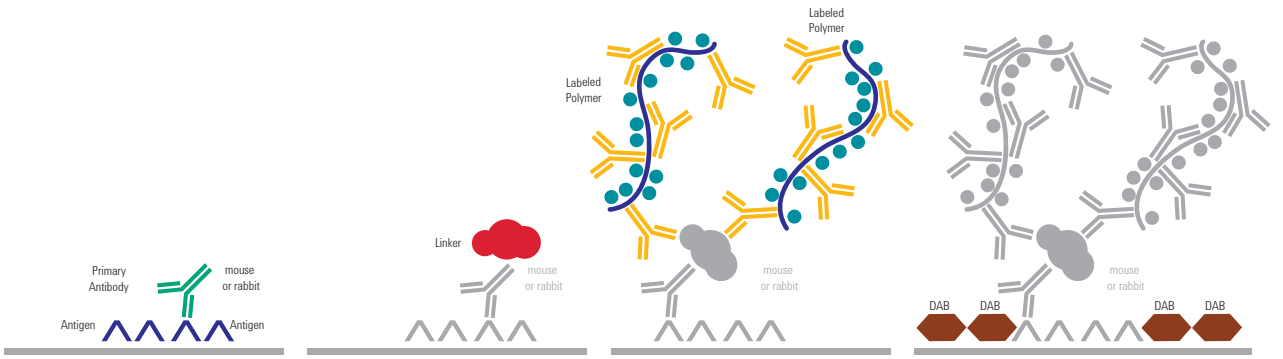
Formalin-fixed, paraffin-embedded tissue sections are suitable for use with EnVision FLEX systems. The kits are packaged either for use on Dako Omnis, Autostainer Link or Dako Autostainer instruments.

## EnVision FLEX System



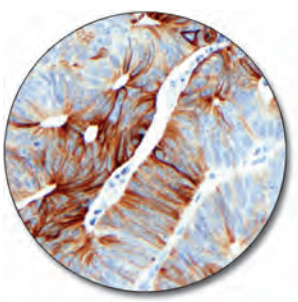

STEP 1 Application of primary antibody.
STEP 2 Application of EnVision FLEX/HRP.
STEP 3 Application of DAB+.

## EnVision FLEX+ System

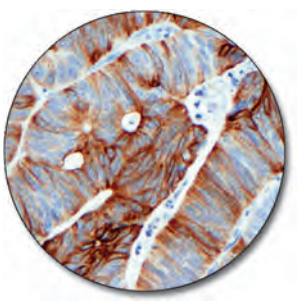



STEP 1 Application of primary antibody.
STEP 2 Application of linker.
STEP 3 Application of EnVision FLEX/HRP.
STEP 4 Application of DAB+.

**Read more about all the EnVision FLEX and FLEX+ kit configurations and optional reagents on the following pages**



*EnVision FLEX, High pH (K8000), 1:75 Ab dilution, Protocol #2, 20 min Ab/HRP incubation. Anti-Cytokeratin 20, clone $K_s$20.8 (Code M7019) applied on colon adenocarcinoma.*



*EnVision FLEX+, Mouse, High pH (K8002), 1:75 Ab dilution, Protocol #7, 10 min Ab/HRP incubation. More intense staining with shorter incubation time. Anti-Cytokeratin 20, clone $K_s$20.8 (Code M7019) applied on colon adenocarcinoma.*

## Dako Omnis

**EnVision FLEX, High pH (Dako Omnis)**

IVD GV800 HRP. Rabbit/Mouse. High pH 600 tests

EnVision FLEX, High pH is a high-sensitivity visualization system intended for use in immunohistochemistry together with Dako Omnis. The dual link system detects primary mouse and rabbit antibodies and the reaction is visualized by DAB+ Chromogen. The convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer and Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9). EnVision FLEX convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Dako Omnis.

**EnVision FLEX Mini Kit, High pH (Dako Omnis)**

IVD GV823 HRP. Rabbit/Mouse. High pH 150 tests

EnVision FLEX Mini Kit, High pH is a high-sensitivity visualization system intended for use in immunohistochemistry together with Dako Omnis. The dual link system detects primary mouse and rabbit antibodies and the reaction is visualized by DAB+ Chromogen. The convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer and Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9). EnVision FLEX convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Dako Omnis.

## Autostainer Link 48

**EnVision FLEX, High pH (Link)**

IVD K8000 HRP. Rabbit/Mouse. High pH 400-600 tests

EnVision FLEX, High pH is a high-sensitivity visualization system intended for use in immunohistochemistry together with Autostainer Link Instruments. The dual link system detects primary mouse and rabbit antibodies and the reaction is visualized by DAB+ Chromogen. The convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer, Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9), and Wash Buffer (20x). EnVision FLEX convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Autostainer Link Instruments.

**EnVision FLEX Mini Kit, High pH (Link)**

IVD K8023 HRP. Rabbit/Mouse. High pH 125-190 tests

EnVision FLEX Mini Kit, High pH is a high-sensitivity visualization system intended for use in immunohistochemistry together with Autostainer Link Instruments. The dual link system detects primary mouse and rabbit antibodies and the reaction is visualized by DAB+ Chromogen. The convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer, Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9), and Wash Buffer (20x). EnVision FLEX convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Autostainer Link Instruments.

**EnVision FLEX+, Mouse, High pH (Link)**

IVD K8002 HRP. Mouse. High pH 400-600 tests

EnVision FLEX+, Mouse, High pH is a very-high-sensitivity visualization system intended for use in immunohistochemistry together with Autostainer Link Instruments. The EnVision FLEX+ Mouse (LINKER) amplifies the signal of primary mouse antibodies and the reaction is visualized by DAB+ Chromogen. In addition to the EnVision FLEX+ Mouse (LINKER) the convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer, Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9), and Wash Buffer (20x). The EnVision FLEX+ Rabbit (LINKER), Code K8009, is an optional EnVision FLEX reagent that may be used with EnVision FLEX and FLEX+ convenience kits to amplify the signal of primary rabbit antibodies. EnVision FLEX+ convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Autostainer Link Instruments.

## Dako Autostainer/Autostainer Plus

**EnVision FLEX, High pH (Dako Autostainer/Autostainer Plus)**

IVD K8010 HRP. Rabbit/Mouse. High pH 400-600 tests

EnVision FLEX, High pH is a high-sensitivity visualization system intended for use in immunohistochemistry together with Dako Autostainer Instruments. The dual link system detects primary mouse and rabbit antibodies and the reaction is visualized by DAB+ Chromogen. The convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer, Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9), and Wash Buffer (20x). EnVision FLEX convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Dako Autostainer Instruments.

**EnVision FLEX Mini Kit, High pH (Dako Autostainer/Autostainer Plus)**

IVD K8024 HRP. Rabbit/Mouse. High pH 125-190 tests

EnVision FLEX Mini Kit, High pH is a high-sensitivity visualization system intended for use in immunohistochemistry together with Dako Autostainer Instruments. The dual link system detects primary mouse and rabbit antibodies and the reaction is visualized by DAB+ Chromogen. The convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer, Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9), and Wash Buffer (20x). EnVision FLEX convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Dako Autostainer Instruments.

**EnVision FLEX+, Mouse, High pH (Dako Autostainer/Autostainer Plus)**

IVD K8012 HRP. Mouse. High pH 400-600 tests

EnVision FLEX+, Mouse, High pH is a very-high-sensitivity visualization system intended for use in immunohistochemistry together with Dako Autostainer Instruments. The EnVision FLEX+ Mouse (LINKER) amplifies the signal of primary mouse antibodies and the reaction is visualized by DAB+ Chromogen. In addition to the EnVision FLEX+ Mouse (LINKER) the convenience kit includes Peroxidase-Blocking Reagent, EnVision/HRP, DAB+ Chromogen, Substrate Buffer, Target Retrieval Solution, High pH (50x Tris/EDTA buffer, pH 9), and Wash Buffer (20x). The EnVision FLEX+ Rabbit (LINKER), Code K8019, is an optional EnVision FLEX reagent that may be used with EnVision FLEX and FLEX+ convenience kits to amplify the signal of primary rabbit antibodies. EnVision FLEX+ convenience kits are compatible with all optional EnVision FLEX and FLEX+ reagents for Dako Autostainer Instruments.

# EnVision FLEX Single Reagents

The flexibility and versatility of EnVision FLEX systems make it easy to tailor a range of solutions to meet the specific needs for the pathology laboratories. The Convenience Kits can be supplemented with our EnVision FLEX Single Reagents.

**Dako Omnis**
- Mouse LINKER
- Rabbit LINKER
- Hematoxylin
- Target Retrieval Solution, High pH
- Target Retrieval Solution, Low pH
- DAB+ Substrate Chromogen System
- Antibody Diluent
- Wash Buffer

**Autostainer Link**
- Mouse LINKER
- Rabbit LINKER
- Hematoxylin
- Target Retrieval Solution, High pH
- Target Retrieval Solution, Low pH
- Antibody Diluent
- Wash Buffer

**Dako Autostainer/Autostainer Plus**
- Mouse LINKER
- Rabbit LINKER
- Hematoxylin
- Target Retrieval Solution, High pH
- Target Retrieval Solution, Low pH
- Antibody Diluent
- Wash Buffer

## Dako Omnis

**DAB+ Substrate Chromogen System (Dako Omnis)**

IVD GV825 Onboard mixing 150 tests

EnVision FLEX DAB+ Substrate Chromogen System (Dako Omnis) is intended for use in immunohistochemistry together with Dako Omnis. The working solution is prepared onboard by the Dako Omnis instrument. It is a high sensitivity DAB system suitable for use in combination with the EnVision FLEX visualization system (Codes GV800/GV823). Upon oxidation, DAB forms a brown end-product at the site of the target antigen. The reagent is intended for use on formalin-fixed, paraffin-embedded tissue sections.

**Hematoxylin (Dako Omnis)**

IVD GC808 Ready-to-use 8 x 22.5 mL, 600 tests

Intended for use in immunohistochemistry together with Dako Omnis. The reagent is recommended for counterstaining on formalin-fixed, paraffin-embedded tissue sections providing a clear blue, nuclear staining.

**Mouse LINKER (Dako Omnis)**

IVD GV821 Ready-to-use 75 tests, 22.5 mL

EnVision FLEX+ Mouse LINKER is an optional EnVision FLEX+ reagent and may be used with EnVision FLEX convenience kits (GV800 and GV823) for Dako Omnis to amplify the signal of primary mouse antibodies.

**Rabbit LINKER (Dako Omnis)**

IVD GV809 Ready-to-use 75 tests, 22.5 mL

EnVision FLEX+ Rabbit LINKER is an optional EnVision FLEX+ reagent and may be used with EnVision FLEX convenience kits (GV800 and GV823) for Dako Omnis to amplify the signal of primary rabbit antibodies.

**Target Retrieval Solution, High pH (Dako Omnis)**

IVD GV804 Concentrate 3 x 68 mL, 225 tests

EnVision FLEX Target Retrieval Solution, High pH (Dako Omnis) is an optional EnVision FLEX reagent containing 50x concentrated Tris/EDTA, pH 9 and is compatible with EnVision FLEX convenience kits for Dako Omnis. The volume is optimized for dilution in Dako Omnis bulk bottles.

**Target Retrieval Solution, Low pH (Dako Omnis)**

IVD GV805 Concentrate 3 x 68 mL, 225 tests

EnVision FLEX Target Retrieval Solution, Low pH (Dako Omnis) is an optional EnVision FLEX reagent containing 50x concentrated citrate buffer, pH 6.1 and is compatible with EnVision FLEX convenience kits for Dako Omnis. The volume is optimized for dilution in Dako Omnis bulk bottles.

**Wash Buffer (20x) (Dako Omnis)**

IVD GC807 Concentrate 20 x 175 mL, 1700 tests

Wash Buffer 20x (Dako Omnis) is intended for use in immunohistochemistry. The product is used as wash buffer for immunohistochemical staining procedures onboard Dako Omnis.

## Autostainer Link 48

**Hematoxylin**
**(Link)**

IVD K8008 Ready-to-use 400-600 tests, 3 x 45 mL

EnVision FLEX Hematoxylin is an optional EnVision FLEX reagent and is recommended for counterstaining. The reagent provides a clear blue, nuclear staining. EnVision FLEX Hematoxylin is compatible with EnVision FLEX and FLEX+ convenience kits.

**Mouse (LINKER)**
**(Link)**

IVD K8021 Ready-to-use 130-200 tests, 40 mL

EnVision FLEX+ Mouse (LINKER) is an optional EnVision FLEX+ reagent and may be used with EnVision FLEX and FLEX+ convenience kits to amplify the signal of primary mouse antibodies.

**Rabbit (LINKER)**
**(Link)**

IVD K8009 Ready-to-use 130-200 tests, 40 mL

EnVision FLEX+ Rabbit (LINKER) is an optional EnVision FLEX+ reagent and may be used with EnVision FLEX and FLEX+ convenience kits to amplify the signal of primary rabbit antibodies.

**Target Retrieval Solution, High pH**

IVD K8004 Concentrate 3 x 30 mL

EnVision FLEX Target Retrieval Solution, High pH is an optional EnVision FLEX reagent containing 50x concentrated Tris/EDTA, pH 9 and is compatible with all EnVision FLEX and FLEX+ convenience kits for both Autostainer Link Instruments and Dako Autostainer Instruments. One 30 mL bottle, when properly diluted, is enough to fill one PT Link tank.

**Target Retrieval Solution, Low pH**

IVD K8005 Concentrate 3 x 30 mL

EnVision FLEX Target Retrieval Solution, Low pH is an optional EnVision FLEX reagent containing 50x concentrated citrate buffer, pH 6.1 and is compatible with all EnVision FLEX and FLEX+ convenience kits for both Autostainer Link Instruments and Dako Autostainer Instruments. One 30 mL bottle, when properly diluted, is enough to fill one PT Link tank.

**Wash Buffer**

IVD K8007 Concentrate 1 L

EnVision FLEX Wash Buffer is an optional EnVision FLEX reagent containing 20x concentrated wash buffer and is compatible with all EnVision FLEX and FLEX+ convenience kits for both Autostainer Link Instruments and Dako Autostainer Instruments.

## Dako Autostainer/Autostainer Plus

**Hematoxylin**
**(Dako Autostainer/Autostainer Plus)**

IVD K8018 Ready-to-use 400-600 tests, 10 x 13 mL

EnVision FLEX Hematoxylin is an optional EnVision FLEX reagent and is recommended for counterstaining. The reagent provides a clear blue, nuclear staining. EnVision FLEX Hematoxylin is compatible with EnVision FLEX and FLEX+ convenience kits.

**Mouse (LINKER)**
**(Dako Autostainer/Autostainer Plus)**

IVD K8022 Ready-to-use 120-190 tests, 3 x 13 mL

EnVision FLEX+ Mouse (LINKER) is an optional EnVision FLEX+ reagent and may be used with EnVision FLEX and FLEX+ convenience kits to amplify the signal of primary mouse antibodies.

**Rabbit (LINKER)**
**(Dako Autostainer/Autostainer Plus)**

IVD K8019 Ready-to-use 120-190 tests, 3 x 13 mL

EnVision FLEX+ Rabbit (LINKER) is an optional EnVision FLEX+ reagent and may be used with EnVision FLEX and FLEX+ convenience kits to amplify the signal of primary rabbit antibodies.

**Target Retrieval Solution, High pH**

IVD K8004 Concentrate 3 x 30 mL

EnVision FLEX Target Retrieval Solution, High pH is an optional EnVision FLEX reagent containing 50x concentrated Tris/EDTA, pH 9 and is compatible with all EnVision FLEX and FLEX+ convenience kits for both Autostainer Link Instruments and Dako Autostainer Instruments. One 30 mL bottle, when properly diluted, is enough to fill one PT Link tank.

**Target Retrieval Solution, Low pH**

IVD K8005 Concentrate 3 x 30 mL

EnVision FLEX Target Retrieval Solution, Low pH is an optional EnVision FLEX reagent containing 50x concentrated citrate buffer, pH 6.1 and is compatible with all EnVision FLEX and FLEX+ convenience kits for both Autostainer Link Instruments and Dako Autostainer Instruments. One 30 mL bottle, when properly diluted, is enough to fill one PT Link tank.

**Wash Buffer**

IVD K8007 Concentrate 1 L

EnVision FLEX Wash Buffer is an optional EnVision FLEX reagent containing 20x concentrated wash buffer and is compatible with all EnVision FLEX and FLEX+ convenience kits for both Autostainer Link Instruments and Dako Autostainer Instruments.

## All Platforms

**Antibody Diluent**

IVD K8006 Diluent 400-600 tests, 120 mL

EnVision FLEX Antibody Diluent is an optional EnVision FLEX reagent and is recommended for the dilution of Dako concentrated Primary Antibodies. EnVision FLEX Antibody Diluent is compatible with all EnVision FLEX and FLEX+ convenience kits for both Dako Omnis, Autostainer Link Instruments and Dako Autostainer Instruments.

**IHC Microscope Slides, FLEX**

IVD K8020 Coated glass slides 5 x 100 slides

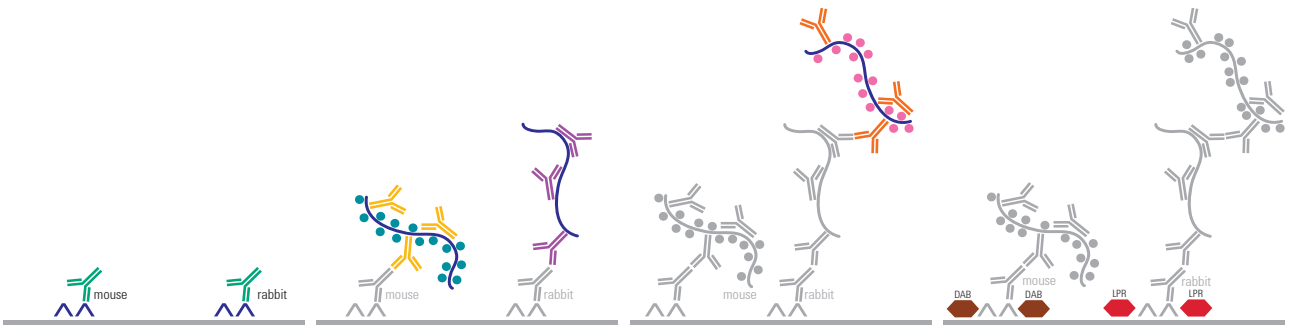
Coated microscope slides for adhesion of formalin-fixed, paraffin-embedded tissue sections for use in immunohistochemistry with Dako EnVision FLEX visualization systems. FLEX IHC Microscope Slides are compatible with, but not limited to, the following Dako instruments: Dako Omnis, Autostainer Link, Dako Autostainer/Autostainer Plus and PT Link.

# EnVision DuoFLEX System

EnVision DuoFLEX Doublestain System is a two-color detection system in an easy-to-choose-and-use kit configuration, based on the EnVision polymer technology known to provide high-quality staining results. The system will enable staining of two or more markers on a single slide using HRP and AP reactions. The system has been developed for ready-to-use DuoFLEX Antibody Cocktails, but may also be used with customers' own antibody cocktails or individual antibodies that are sequentially incubated on a single slide. The final staining result will be brown using DAB for mouse primary antibodies and red using LPR (liquid permanent red) for rabbit primary antibodies.

Staining for two or more targets in one tissue section will not only provide a two-color staining result using just one procedure thereby reducing time, but also give a more complex and informative staining result of the antigen expression in the particular tissue section. For further time savings it can be used with Dako DuoFLEX Antibody Cocktails.

**EnVision DuoFLEX Doublestain System** is a simple, four-step visualization system of high sensitivity. The kit is ready-to-use and suitable for use on formalin-fixed, paraffin-embedded tissue sections. The kit is packaged for use on Autostainer Link Instruments.




STEP 1 Application of mouse and rabbit primary antibodies.

STEP 2 Application of HRP-conjugated polymers and secondary polymers.

STEP 3 Application of AP-conjugated polymers.

STEP 4 Application of chromogenic substrates: brown DAB and LPR.

**EnVision DuoFLEX Doublestain System**

IVD SK110 HRP/AP, Rabbit/Mouse▲ 100-150 tests, 30 mL

EnVision DuoFLEX Doublestain System is intended for use in immunohistochemistry together with Autostainer Link instruments. This system is useful for the simultaneous detection of multiple antigens present in low or high concentrations within one specimen. The visualization is based on peroxidase (HRP) using DAB+ as chromogen and alkaline phosphatase (AP) using Permanent Red as chromogen. EnVision DuoFLEX Doublestain System is biotin-free, thus significantly reducing non-specific staining resulting from endogenous avidin-biotin activity. This visualization system should be used for Dako DuoFLEX Cocktail antibodies.
Note: The number of tests is based on the use of 200 µL or 300 µL of reagent per slide.

▲ Packaged in vials for use with Autostainer Link instruments

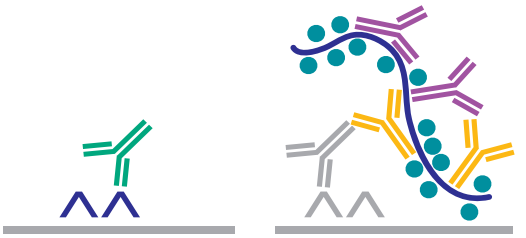
# EnVision Systems

Dako EnVision Systems are simple, two-step visualization systems of very high sensitivity. They are based on a unique enzyme-conjugated polymer backbone, which, in addition, also carries secondary antibody molecules. Endogenous biotin will not affect EnVision staining results.

The EnVision+ System has a particularly high sensitivity, and a recommended 30-minute incubation time with primary antibody and EnVision+ Reagent, respectively.

The EnVision G|2 Systems are 2nd generation visualization kits. Routinely fixed paraffin sections, smears, frozen sections, imprints and cytocentrifuge preparations are suitable for use with EnVision Systems. The number of tests that can be performed with the individual product is based on the use of 100 µL of reagent per slide.

EnVision DuoFLEX Doublestain System is useful for the simultaneous detection of multiple antigens present in low or high concentrations within one specimen.



STEP 1 Application of primary antibody. Incubate 10 or 30 min.

STEP 2 Application of EnVision. Incubate 10 or 30 min.

### EnVision G|2 Doublestain System Rabbit/Mouse (DAB+/Permanent Red)

IVD K5361 150 tests

EnVision G|2 Doublestain System is a high-sensitivity peroxidase and alkaline-phosphatase-based 2nd generation visualization kit. The kit is intended for use in immunohistochemistry for the simultaneous detection of two different antigens within the same specimen, and is compatible with suitably diluted rabbit and mouse primary antibodies. The kit may be used on formalin-fixed, paraffin-embedded tissue sections and fixed cell smears. In addition to the ready-to-use EnVision G|2 reagents packaged in Dako Autostainer Reagent Vials, the kit includes both DAB+ and Permanent Red chromogenic substrate systems.
Note: The number of tests for this kit is based on the use of 200 µL of reagent per slide.

### EnVision G|2 System/AP Rabbit/Mouse (Permanent Red)

IVD K5355 50 tests/500 tests

EnVision G|2 System/AP is a high-sensitivity alkaline-phosphatase-based 2nd generation visualization kit. The kit is intended for use in immunohistochemistry, and it is compatible with suitably diluted rabbit and mouse primary antibodies. The kit may be used on formalin-fixed, paraffin-embedded tissue sections, frozen sections and fixed cell smears. In addition to the ready-to-use EnVision G|2 reagents packaged in Dako Autostainer Reagent Vials, the kit includes a Permanent Red chromogenic substrate system. The kit may be used in manual procedures or with the Dako Autostainer instruments.
Note: The number of tests for this kit is based on the use of 200 µL of reagent per slide.

### EnVision+ Kits

| | | | |
|---|---|---|---|
| IVD | K4004 | HRP. Mouse (AEC+) | 150 tests |
| IVD | K4005 | HRP. Mouse (AEC+) | 1100 tests |
| IVD | K4006 | HRP. Mouse (DAB+) | 150 tests |
| IVD | K4007 | HRP. Mouse (DAB+) | 1100 tests |
| IVD | K4008 | HRP. Rabbit (AEC+) | 150 tests |
| IVD | K4009 | HRP. Rabbit (AEC+) | 1100 tests |
| IVD | K4010 | HRP. Rabbit (DAB+) | 150 tests |
| IVD | K4011 | HRP. Rabbit (DAB+) | 1100 tests |

These ready-to-use, peroxidase-based EnVision+ kits are compatible with suitably diluted mouse or rabbit primary antibodies, respectively. In addition to the ready-to-use EnVision+ reagent, the kits include a blocking reagent for endogenous peroxidase, and a high sensitivity 3-amino-9-ethylcarbazole (AEC+) chromogenic substrate system. The kits are provided with detailed instructions.

### EnVision+ Dual Link Kit

IVD K4065 HRP. Rabbit/Mouse (DAB+) 150 tests

This ready-to-use, peroxidase-based EnVision+ Dual Link Kit is compatible with suitably diluted rabbit and mouse primary antibodies. In addition to the ready-to-use EnVision+ Dual Link reagent, the kit includes a blocking reagent for endogenous peroxidase and a high-sensitivity diaminobenzidine (DAB+) chromogenic substrate system. The kit is provided with detailed instructions.

### EnVision+ Dual Link, Single Reagents

| | | | |
|---|---|---|---|
| IVD | K4063 | HRP. Rabbit/Mouse | 150 tests, 15 mL |
| IVD | K4061 | HRP. Rabbit/Mouse | 1100 tests, 10 x 11 mL |

These ready-to-use, peroxidase-conjugated EnVision+ Dual Link reagents are compatible with suitably diluted rabbit and mouse primary antibodies. A working procedure is included with the reagents.

### EnVision+ Single Reagents

| | | | |
|---|---|---|---|
| IVD | K4000 | HRP. Mouse | 150 tests, 15 mL |
| IVD | K4001 | HRP. Mouse | 1100 tests, 110 mL |
| IVD | K4002 | HRP. Rabbit | 150 tests, 15 mL |
| IVD | K4003 | HRP. Rabbit | 1100 tests, 110 mL |

These ready-to-use, peroxidase-conjugated EnVision+ reagents are compatible with suitably diluted mouse or rabbit primary antibodies, respectively. A working procedure is included with the reagents.

# Other Visualization Systems

In this section you will find all Dako visualization systems that are not part of the EnVision series. These visualization systems are ADVANCE, ARK, CSA, CSA II and LSAB2.

### ADVANCE

| | | | |
|---|---|---|---|
| IVD | K4069 | HRP. Rabbit/Mouse | 55 tests, 11 mL |
| IVD | K4068 | HRP. Rabbit/Mouse | 550 tests, 110 mL |

This ready-to-use, peroxidase-based ADVANCE kit is compatible with suitably diluted rabbit and mouse primary antibodies. The ADVANCE kit is a super-sensitive, non-biotin based, immunohistochemical visualization system that is useful for the detection of antigens in low concentrations, for short incubation time or for higher dilution of primary antibodies. ADVANCE is 5 or more times more sensitive than EnVision+ and with approximately the same sensitivity as CSA II.
Note: The number of tests for this kit is based on the use of 200 µL of reagent per slide.

### ARK (Animal Research Kit) Peroxidase

| | | | |
|---|---|---|---|
| RUO | K3954 | | 150 tests |

For use with mouse primary antibodies.
Included in the kit is peroxidase-blocking reagent, biotinylated F(ab') anti-mouse Ig, normal mouse serum, peroxidase-conjugated streptavidin, buffered substrate solution, and liquid DAB+ chromogen (3,3'-diaminobenzidine solution). The number of tests is based on the use of 100 µL of reagent per slide. The kit is provided with detailed instructions.

The ARKulator is recommended for automatic calculation of reagent volumes required for preparation of primary antibodies. Download ARKulator for free from our Web site.

### CSA, Catalyzed Signal Amplification System

| | | | |
|---|---|---|---|
| IVD | K1500 | | 150 tests |

For use with monoclonal mouse primary antibodies.
The kit contains a blocking solution for endogenous peroxidase, protein block for reduction of background staining, and chromogenic substrate for peroxidase (DAB). The primary antibody and negative control are sufficient for 70 tests. The other reagents of the kit are for 150 tests. The number of tests is based on the use of 100 µL of reagent per slide. The kit is provided with detailed instructions.

Reference:

1. Erber WN, Willis JI, Hoffman GJ. An enhanced immunocytochemical method for staining bone marrow trephine sections. J Clin Pathol 1997;50:389-93.

### CSA II, Biotin-Free Catalyzed Amplification System

| | | | |
|---|---|---|---|
| IVD | K1497 | | 150 tests, 15 mL |

For use with monoclonal mouse primary antibodies.
The CSA II kit contains a blocking solution for endogenous peroxidase, protein block for reduction of background staining, and chromogenic substrate for peroxidase (DAB). The reagents of the kit are for 150 tests. The number of tests is based on the use of 100 µL of reagent per slide. The kit is provided with detailed instructions.

### CSA II Rabbit Link

| | | | |
|---|---|---|---|
| IVD | K1501 | | 150 tests, 15 mL |

CSA II Rabbit Link is for use with polyclonal rabbit primary antibodies and the ultra-sensitive, biotin-free CSA II System, Code K1497. The CSA II System is intended for difficult, low-affinity primary antibodies of mouse origin and can be adapted for use with rabbit primary antibodies by replacing the peroxidase-conjugated secondary antibody in Code K1497 with the CSA II Rabbit Link, Code K1501. CSA II Rabbit Link is ready-to-use, peroxidase-conjugated goat anti-rabbit immunoglobulins. The number of tests is based on the use of 100 µL of reagent per test.

### LSAB2 Kits, Universal

| | | | |
|---|---|---|---|
| IVD | K0675 | HRP. Rabbit/Mouse | 1100 tests |
| RUO | K0609 | HRP. Rabbit/Mouse. For use on rat tissue | 150 tests |

These 2nd generation visualization kits are for use with both rabbit and mouse primary antibodies. The biotinylated link antibody in the kits is produced in goat. No blocking step for reducing background staining caused by protein-protein interaction is required, the enzyme-conjugated streptavidin is provided in prediluted form.
It is a prerequisite for omission of the blocking step that the primary antibody is diluted in a buffer containing 1% bovine serum albumin. In K0609, the biotinylated link antibody shows no cross-reaction with rat immunoglobulins. This kit is therefore well-suited for use on rat tissue.
Note: The kits, K0609 and K675, do not contain chromogenic substrate.

### Streptavidin

| | | | |
|---|---|---|---|
| IVD | P0397 | HRP | 1 mL |

The conjugate is optimized for use in immunohistochemical procedures, but it is also well-suited for other techniques.
The streptavidin used for conjugation has an inherent low non-specific binding. The streptavidin conjugate is particularly useful in techniques where binding to lectins is undesirable because, in contrast to avidin from chicken's egg, streptavidin does not contain carbohydrate moieties.

# Ancillaries for IHC

We offer a range of other products in our Immunohistochemistry section. These products cover chromogenic substrates, blocking reagents, buffers and diluents, counterstains, mounting media, proteolytic enzymes, and Dako Pen, slides and Pascal strips.

This section lists reagents that are not used for a specific instrument. For reagents specifically developed for an instrument, please go to the Ancillaries and Accessories section for the instrument.

## Chromogenic Substrates

**AEC Substrate-Chromogen**

IVD K3464 Ready-to-use 1100 tests, 110 mL

AEC Substrate-Chromogen is suitable for use in peroxidase-based immunohistochemical and in situ hybridization staining methods. AEC (3-amino-9-ethylcarbazole) forms a red end-product at the site of the target antigen or nucleic acid. AEC must be used together with aqueous mounting fluids.

**AEC+ Substrate-Chromogen**

IVD K3461 Ready-to-use 150 tests, 15 mL
IVD K3469 Ready-to-use 1100 tests, 110 mL

AEC+ Substrate-Chromogen is especially useful in applications requiring high sensitivity. It is suitable for use in peroxidase-based immunohistochemical and in situ hybridization staining methods. AEC (3-amino-9-ethylcarbazole) forms a red end-product at the site of the target antigen or nucleic acid. AEC has to be used together with aqueous mounting fluids.

**BCIP/NBT Substrate System**

IVD K0598 150 tests

Intended for both immunohistochemical and in situ hybridization staining procedures. Alkaline phosphatase develops an intensely dark blue-purple, insoluble reaction product when exposed to BCIP (5-bromo-4-chloro-3-indolyl phosphate), and NBT (nitro blue tetrazolium). The number of tests is based on the use of 100 µL of reagent per slide.

**DAB Enhancer**

IVD S1961 30 mL/110 mL

DAB Enhancer is a ready-to-use enhancement reagent for DAB chromogens. It can be used as an auxiliary automated step on the Dako Autostainer instruments for richer, chocolate-brown DAB results.

**DAB+, Liquid**

IVD K3467 150 tests, 15 mL
IVD K3468 1100 tests, 110 mL

Liquid DAB+ is a high-sensitivity substrate-chromogen system for use in peroxidase-based immunohistochemical and in situ hybridization staining methods. DAB (diaminobenzidine) forms a very stable, brown end-product at the site of the target antigen or nucleic acid. DAB may be used together with mounting fluids containing organic solvents.

**Fuchsin+ Substrate-Chromogen**

IVD K0625 300 tests, 30 mL/1100 tests, 110 mL

Intended for both immunohistochemical and in situ hybridization staining procedures when alkaline phosphatase is the enzyme label. The Fuchsin+ Substrate-Chromogen is especially useful in applications requiring high sensitivity and can be used with Dako LSAB+/AP or similar visualization systems. Fuchsin+ forms a red/magenta-colored, semi-permanent reaction product at the site of the target antigen or nucleic acid.

**New Fuchsin Substrate System**

K0698 1750 tests

Intended for immunohistochemical staining procedures when alkaline phosphatase is the enzyme label. The New Fuchsin Substrate System is especially useful on tissue sections. The number of tests is based on the use of 100 µL of reagent per slide.

**Permanent Red**

K0695 10 tablets, 30 mL

Intended for both immunohistochemical and in situ hybridization staining procedures when alkaline phosphatase is the enzyme label. Permanent Red is a Fast Red chromogen that yields a vibrant, red-colored, permanent reaction product at the site of the target antigen or nucleic acid. It can be dehydrated in alcohol, xylene or xylene substitutes and permanently mounted with an organic mounting medium while maintaining a vibrant staining result.

**Permanent Red Substrate-Chromogen, Liquid**

IVD K0640 2-component system 300 tests, 30 mL/1100 tests, 110 mL

Liquid Permanent Red (LPR) Substrate-Chromogen offers ease of use and is intended for use in immunohistochemical and in situ hybridization staining methods where alkaline phosphatase is the enzyme label. LPR forms a permanent red reaction product at the site of the target antigen or nucleic acid, which can be visualized with standard optical light microscopy or fluorescence microscopy using Texas Red or Rhodamine filters (1). Coverslip with permanent or aqueous mounting media. The number of tests is based on the use of 100 µL of reagent per slide.

Reference:

1. Speel EJ, Schutte B, Wiegant J, Raemaekers FC, Hopman AH. A novel fluorescence detection method for in situ hybridization, based on the alkaline phosphatase-fast red reaction. J Histochem Cytochem 1992;40:1299-308.

## Blocking Reagents, Buffers, Diluents

**Antibody Diluent**

IVD S0809 Ready-to-use diluent 50 mL/125 mL

Antibody Diluent is intended for the preparation of primary and secondary antibody dilutions as well as negative control reagents for use in immunohistochemical staining procedures.

**Antibody Diluent, Background Reducing**

IVD S3022 Ready-to-use diluent 50 mL/125 mL

This product is for dilution of antibodies which tend to give high, non-specific background staining in immunohistochemical procedures. S3022 diminishes background staining while maintaining adequate, but occasionally reduced, specific staining.

# Blocking Reagents, Buffers, Diluents (continued)

**Biotin-Blocking System**

IVD X0590 Ready-to-use reagents 15 mL + 15 mL

This product inhibits non-specific staining due to endogenous biotin in immunohistochemical procedures employing avidin-biotin based visualization systems. Package size: 15 mL avidin solution and 15 mL biotin solution.

**Levamisole Solution**

IVD X3021 AP-inhibitor 15 mL

Levamisole reduces endogenous alkaline phosphatase activity in frozen sections and cell smears. Add 1 drop of X3021 to 1 mL of the chromogenic substrate used for alkaline phosphatase staining. Note that placental and intestinal alkaline phosphatases are not inhibited by levamisole.

**Peroxidase and Alkaline Phosphatase Blocking Reagent (Dual Endogenous Enzyme-Blocking Reagent)**

IVD S2003 10 x 11 mL△

Suppresses endogenous alkaline phosphatase and peroxidase in cell preparations, frozen tissue sections, and formalin-fixed, paraffin-embedded tissue sections.

**Phosphate-Buffered Saline, pH 7.0**

IVD S3024 6 x 1 L

The buffer is supplied as 6 packages. Each makes 1 L of 0.02 mol/L sodium phosphate buffer, 0.15 mol/L NaCl, pH 7.0.

**Protein Block, Serum-Free**

IVD X0909 110 mL

For blocking non-specific background staining in immunohistochemical procedures. Is compatible with all primary and secondary antibodies regardless of species.

**Target Retrieval Solution**

IVD S1699 Concentrate 500 mL, 10x concentrated
IVD S1700 Ready-to-use solution 500 mL

This product is a modified citrate buffer, pH 6.1. Using S1700 and S1699 for heat-induced target retrieval significantly improves the staining results obtained with many previously unreactive antigens/antibodies in formalin-fixed, paraffin-embedded tissue sections compared to using a standard 0.01 mol/L citrate buffer, pH 6.0. S1700 and S1699 are also useful for in situ hybridization procedures.

**Target Retrieval Solution, Citrate pH 6**

IVD S2369 Concentrate 500 mL, 10x concentrated

This product is a citrate buffer, pH 6, intended for heat-induced target retrieval prior to immunohistochemical staining procedures. It is well-suited for use on formalin-fixed, paraffin-embedded tissue sections mounted on glass slides, and for use on cytological specimens.

**Target Retrieval Solution, pH 9**

IVD S2367 Concentrate 500 mL, 10x concentrated
IVD S2368 Ready-to-use solution 500 mL

This product is a Tris/EDTA buffer, pH 9, intended for heat-induced target retrieval prior to immunohistochemical staining procedures. It is well-suited for use on formalin-fixed, paraffin-embedded tissue sections mounted on glass slides. Compared with 0.01 mol/L citrate buffer, pH 6, the use of Target Retrieval Solution, pH 9, significantly improves staining results for many antigens, and it is especially useful in combination with the Dako EnVision visualization systems. Target Retrieval Solution, pH 9, is as effective as pH 9.9 solutions for the majority of antigens, and it preserves the morphology better.

**Target Retrieval Solution, pH 9 (10x), (3-in-1)**

IVD S2375 Concentrate 500 mL, 10x concentrated

This reagent is designed for optimal performance when used together with Dako PT Link, for 3-in-1 procedure for deparaffinization, rehydration, and heat-induced epitope-retrieval (HIER) of formalin-fixed, paraffin-embedded tissue sections prior to staining on Dako Autostainer, Autostainer Plus, Autostainer Link Instruments or manual staining. This reagent can also be used as target retrieval solution (HIER) after conventional deparaffinization of the tissue sections.

**Tris-Buffered NaCl Solution with Tween 20, pH 7.6**

IVD S3306 Diluent and wash buffer 500 mL, 10x concentrated

Makes 5 L of working buffer, 0.05 mol/L Tris/HCl, 0.30 mol/L NaCl, 0.1% Tween 20, pH 7.6. Contains a preservative. The relatively high salt concentration makes this buffer particularly well-suited for immunohistochemical staining methods that require very thorough washing and for in situ hybridization procedures.

**Tris-Buffered Saline, pH 7.6**

IVD S3001 Diluent and wash buffer 6 x 1 L
IVD S1968 Diluent and wash buffer 2 x 5 L

Supplied as packets of buffer salts for making 6 x 1 L or 2 x 5 L of 0.05 mol/L Tris/HCl, 0.15 mol/L NaCl, pH 7.6.

**Tween 20**

IVD S1966 100 mL

**Wash Buffer 10x**

IVD S3006 Concentrate 1 L, 10x concentrated

Makes 10 L of working buffer, 0.05 mol/L Tris/HCl, 0.15 mol/L NaCl, 0.05% Tween 20, pH 7.6. Contains a preservative. Well-suited as a wash buffer for immunohistochemical staining methods using manual procedures and Dako automated platforms.

# Counterstains

**Hematoxylin**

IVD S3302 500 mL

**Hematoxylin, Mayer's**

IVD S3309 Ready-to-use aqueous solution 500 mL

Hematoxylin is well-suited as nuclear counterstain for chromogens such as AEC, DAB, Fast Red, Fuchsin and Liquid Permanent Red.

**Methyl Green**

IVD S1962 Ready-to-use 500 mL

Methyl Green enhances nuclear staining in tissue sections and cell preparations when used together with chromogens such as DAB or Fuchsin. A detailed procedure ensuring optimal results is supplied with the product.

△ Packaged in vials for use with Dako Autostainer instruments

# Mounting Media

**Faramount Mounting Medium, Aqueous**

IVD S3025 Mounting medium 15 mL

This mounting medium is specifically formulated for mounting tissue specimens, cell smears, and cytospins which have been stained with immunohistochemical methods for viewing by light microscopy. It is ideal for use with chromogens, such as AEC, that are alcohol-soluble or incompatible with organic solvents. Faramount dries completely when slides are cover-slipped forming a coating that facilitates handling and storage.

**Fluorescence Mounting Medium**

IVD S3023 Mounting medium 15 mL

Usage of this mounting medium will help reduce fading of immunofluorescence during microscopy.

**Glycergel Mounting Medium, Aqueous**

IVD C0563 Mounting medium 15 mL

Glycergel is an aqueous, histologic mounting medium. Glycergel is suitable whenever a permanent, watersoluble mounting medium is desired. Provided in dropper bottle.

**Ultramount Permanent Mounting Medium, Aqueous**

IVD S1964 Mounting medium 15 mL

This mounting medium does not require cover-slipping. It is specially formulated for permanent mounting of tissue specimens, cell smears and cytospins which have been stained with histochemical and immunohistochemical methods for viewing by light microscopy. It is ideal for use with chromogens such as AEC and Fast Red that are alcohol-soluble or incompatible with organic solvents. Ultramount dries completely over the specimen forming a clear, solid coating.

# Proteolytic Enzymes

**Pepsin**

IVD S3002 Proteolytic enzyme 6 x 250 to 500 mL

Pepsin is used for the proteolytic digestion of paraffin-embedded, formalin-fixed tissues prior to in situ hybridization procedures, or prior to staining of certain antigens by immunohistochemical methods. The pepsin in each packet is sufficient for preparing 250 mL of pepsin solution for in situ hybridization, or 500 mL of pepsin solution for immunohistochemistry. When used in a staining bath, this volume is sufficient for treating 25-50 slides.

**Proteinase K**

IVD S3004 2 mL concentrate 2mL
IVD S3020 Ready-to-use 150 tests, 15 mL/1100 tests, 110 mL

Proteinase K is intended for proteolytic digestion of formalin-fixed, paraffin-embedded tissues prior to immunohistochemical or in situ hybridization procedures.

**Proteolytic Enzyme**

IVD S3007 Ready-to-use 10 x 11 mL△

Proteolytic Enzyme, Ready-to-Use, is intended for the proteolytic digestion of formalin-fixed, paraffin-embedded tissues, cell blocks or cell specimens prior to immunohistochemical (IHC) or in situ hybridization (ISH) procedures. Proteolytic digestion of formalin-fixed tissues improves accessibility of antibodies and DNA probes to target sites within tissues. In IHC, proteolytic digestion exposes certain epitopes which have been masked during fixation. In ISH procedures, accessibility of DNA sequences is enhanced allowing better probe penetration and hybridization.

# Dako Pen, Slides and Pascal Quality Strips

**Dako Pen**

IVD S2002 Delimiting pen 1 unit

Using the Dako Pen, a water repelling 'magic circle' can be drawn around tissue sections. This circle provides a barrier to liquids such as antibody solutions or chromogenic substrates applied to the sections, thus helping to obtain more uniform immunohistochemical staining results and making it possible to reduce the amount of reagents.

**IHC Microscope Slides, FLEX**

IVD K8020 Coated glass slides 5 x 100 slides

Coated microscope slides for adhesion of formalin-fixed, paraffin-embedded tissue sections for use in immunohistochemistry with Dako EnVision FLEX visualization systems. FLEX IHC Microscope Slides are compatible with, but not limited to, the following Dako instruments: Dako Omnis, Autostainer Link, Dako Autostainer/Autostainer Plus and PT Link.

**Pascal Quality Strips**

IVD S2801 100 strips

Pascal Quality Strips are heat and pressure-sensitive strips that allow the user to monitor both pressure and heat inside the Pascal pressure chamber. The strip must register the proper color (charcoal black) to ensure that optimum heat and pressure are achieved. The strip can be dated and used for quality assurance purposes.

**Silanized Slides**

IVD S3003 100 slides

The use of slides coated with organosilane in combination with baking for at least 30 minutes at 55-60 °C ensures optimal adhesion of tissue sections.

△ Packaged in vials for use with Dako Autostainer instruments

# Label Printers

Label printers provide a simple and efficient way to permanently identify slides. We offer two label printers: one label printer (Code DL412) which works with Dako instruments connected through DakoLink software as well as Dako CoverStainer, and one (Code S2700) which is specific for Dako Autostainer Plus.

**Universal Label Printer (Link) prints text and barcodes on**

- Large Flap Slide Labels, Code S3417
- Square Flap Slide Labels, Code S3380
- Small Flap Slide Labels, Code DL213

**Label Printer (Autostainer Plus) prints text and barcodes on**

- Large Flap Slide Labels, Code S3417
- Square Flap Slide Labels, Code S3380

## Universal Label Printer (Link)

DL412 Label printer 1 unit

The printer works with all Dako instruments connected through DakoLink software as well as Dako CoverStainer. This direct thermal printer is engineered to print large, square and small flap labels from Large Flap Slide Label Kit, Code S3417, Square Flap Label Roll, Code S3380, and Small Flap Slide Label Kit, Code DL213.

### Components

- Label printer
- USB communication cable and powercord
- Printed product information

### System Specifications

- Model: Zebra GX430t
- Dimensions: 19 cm W x 26 cm D x 19 cm H (7.6" W x 10.2" D x 7.5" H)
- Weight: 2.1 kg (4.6 lbs)
- Electrical: 100-240 VAC , 50-60 Hz
- Ribbon size: 11 cm W x 91 m L (4.3" W x 298.5' L)

## Label Printer (Dako Autostainer Plus)

S2700 Label printer 1 unit

The printer works only with Dako Autostainer Plus instruments. This direct thermal printer is engineered to print both large and square flap labels from Large Flap Slide Label Kit, Code S3417 and Square Flap Slide Label Roll, Code S3380.

### Components

- Label printer
- USB communication cable and powercord
- Printed product information

### System Specifications

- Model: Zebra GX420t
- Dimensions: 19 cm W x 26 cm D x 19 cm H (7.6" W x 10.2" D x 7.5" H)
- Weight: 2.1 kg (4.6 lbs)
- Electrical: 100-240 VAC, 50-60 Hz
- Ribbon size: 11 cm W x 91 m L (4.3" W x 298.5' L)

# Slide Labels

The slide label is an innovative new slide identification solution that provides a means for permanent identification of slides using text and barcodes. The labels are highly resistant to heat (up to 130 °C) and chemicals used in the slide staining and preparation process, including xylene, acetic acid, ethanol, ammonia, and common laboratory stains. A chemical resistant flap protects the labels. Slide Labels are printed using a direct thermal process using Label Printers.

**Labels are resistant to the following procedures, chemicals and stains**

Deparaffinization of tissue sections
HIER in aqueous solutions
Hydrogen peroxide
Glacial acetic acid
Bleach
Hematoxylin stain (organic and aqueous)
Methyl Green stain
Iodine stain
Papanicolaou stain (Pap stain)
Gram stain
PAS stain
Trichrome stain
Wright stain
Silver stain
Giemsa stain
Iron stain

**Slide Label Kit, Large Flap**

S3417 Large flap slide label kit — 3000 labels

The label kit consists of 6 label rolls, each containing 500 individual labels, 1 ribbon roll for printing of 3000 labels, 1 cleaning pen for printer maintenance, and 1 cleaning kit of 23 mL isopropyl alcohol and 25 cotton swabs.

**Specifications**

- Label size: 24 mm W x 22 mm H (0.950" W x 0.875" H)
- 1 label across
- Tear-off perforation between rows of labels
- 500 labels per roll, 6 rolls per kit
- 3000 labels per kit
- Extra roll with Large Flap Labels, Code S3386
- Cleaning pen for printer maintenance is included in the kit

**Slide Labels, Large Flap**

S3386 Large flap labels — 500 labels

**Slide Label Kit, Small Flap**

DL213 Small flap slide label kit — 1500 labels

The slide label is an innovative slide identification solution that provides a means for permanent identification of slides using text and barcodes. The labels are highly resistant to heat (up to 130 °C) and chemicals used in the slide staining and preparation process, including xylene, acetic acid, ethanol, ammonia, and common laboratory stains. Slide Labels are printed using a direct thermal process using Universal Label Printer, Code DL412.

**Specifications**

- Label size: 0.875" W x 0.75" H (22 mm W x 19 mm H)
- 1 label across
- Tear-off perforation between rows of labels
- 500 labels per roll, 3 rolls per kit
- 1500 labels per kit
- Extra roll with 500 labels, Code S3393
- 1 ink ribbon
- 1 cleaning pen for printer maintenance is included in the kit

**Slide Labels, Small Flap**

S3393 Small flap labels — 500 labels

**Slide Labels, Square Flap**

S3380 Square flap labels — 500 labels

**Specifications**

- Label size: 0.875" W x 0.875" H (22 mm W x 22 mm H)
- 1 label across
- Tear-off perforation between rows of labels
- 500 labels per roll

# pharmDx Solution

# Introduction to the pharmDx Solution

### Quality results for precise interpretation

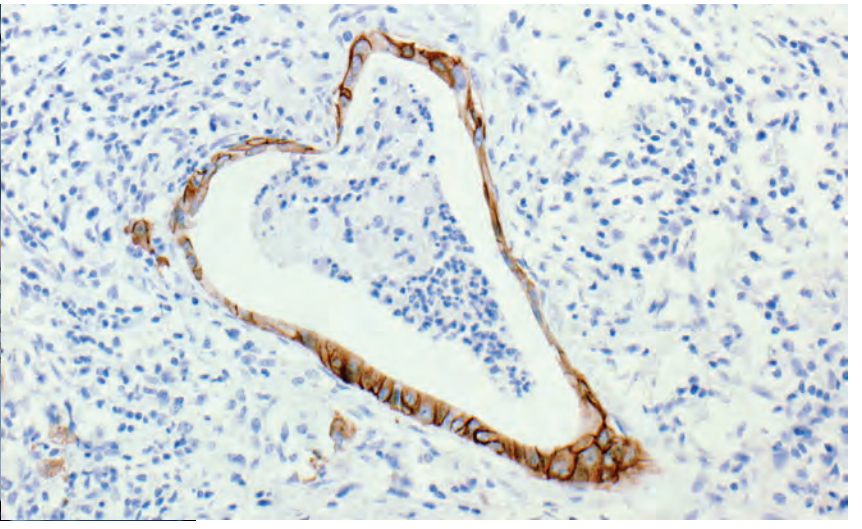
Dako pharmDx Solution is a portfolio of all-in-one pharmDx kits that lead to optimal diagnostic results with accuracy and quality.

### pharmDx is all about personalized medicine

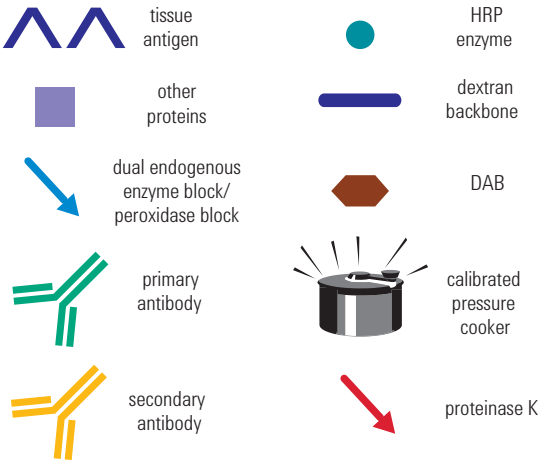
Dako pharmDx kits make a difference to the assessment of patient treatment. The validated kits have the right specificity and sensitivity. Correct results the first time lead to fewer reruns and will help select the right therapy for each patient - every time. We help improve patient care by delivering fast results with great confidence and reducing time from biopsy to diagnosis.

### Dako pharmDx Solution provides you with:

- All-in-one kits that include reagents, control cell line slides and protocols
- Established methodology
- Detailed interpretation manuals
- Comprehensive educational programs
- Expert technical support



**Legend for Schematics**



# c-Kit pharmDx Kits

c-kit, otherwise known as CD117 and stem cell factor receptor, is a 145 kDa type III transmembrane receptor tyrosine kinase encoded by the c-Kit proto-oncogene. Studies suggest that the c-Kit gene product is closely related to the process of malignant transformation, and to the pathogenesis of some specific types of human solid tumors (1-3).

The c-Kit pharmDx assay is a qualitative immunohistochemical (IHC) kit system used for the identification of c-kit (CD117) protein/CD117 antigen (c-kit protein) expression in normal and neoplastic formalin-fixed, paraffin-embedded tissues for histological evaluation. The c-Kit pharmDx rabbit polyclonal antibodies specifically detect the c-kit protein in CD117 antigen-expressing cells.

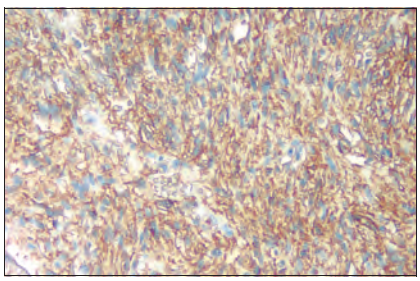
The c-Kit pharmDx is indicated as an aid in the differential diagnosis of gastrointestinal stromal tumors (GIST). After diagnosis of GIST, results from c-Kit pharmDx may be used as an aid in identifying those patients eligible for treatment with Gleevec®/Glivec® (imatinib mesylate).

Results from hematoxylin and eosin (H&E) stains and a panel of antibodies can aid in the differential diagnosis of GIST. Interpretation must be made by a qualified pathologist, within the context of a patient's clinical history, proper controls, and other diagnostic tests.

Note: This test is not intended as the sole basis for making the diagnosis of GIST and is not intended as the sole basis for selecting Gleevec®/Glivec® therapy. The outcome of c-kit negative GIST patients treated with Gleevec®/Glivec® has not been established. A negative result would not necessarily exclude the diagnosis of GIST, nor should it preclude treatment with Gleevec®/Glivec® (1-3).

All subjects in the Novartis Gleevec®/Glivec® clinical trials were selected using the anti-c-kit protein primary antibody used in the c-Kit pharmDx kit under an investigational Novartis Clinical trial protocol (NCTP). The primary anti-c-Kit rabbit polyclonal antibody reagent used in the NCTP was purchased from Dako. The c-Kit pharmDx primary polyclonal antibody reagent underwent the same method of production, purification and quality control as did the NCTP polyclonal anti-c-Kit reagent.
c-Kit pharmDx utilizes a simple two-step staining procedure and is suitable for formalin-fixed, paraffin-embedded specimens. The kit includes ready-to-use primary antibody, negative control reagent, cell line control slides and detailed instructions.


References:
1. de Silva CM, Reid R. Gastrointestinal stromal tumors (GIST): C-kit mutations, CD117 expression, differential diagnosis and targeted cancer therapy with Imatinib. Pathol Oncol Res 2003;9:13-9.
2. van Oosterom AT, Judson I, Verweij J, Stroobants S, Donato di Paola E, Dimitrijevic S, et al. Safety and efficacy of imatinib (STI571) in metastatic gastrointestinal stromal tumours: a phase I study. Lancet 2001;358:1421-3.
3. Miettinen M, Lasota J. Gastrointestinal stromal tumors - definition, clinical, histological, immunohistochemical, and molecular genetic features and differential diagnosis. Virchows Arch 2001;438:1-12.
4. Heinrich M, Corless C, Duensing A, McGreevey L, Chen CJ, Joseph N, et al. PDGFRA activating mutations in gastrointestinal stromal tumors. Science 2003;229:708-10.
5. Taniguchi M, Nishida T, Hirota S, Isozaki K, Ito T, Nomura T, et al. Effect of c-KIT mutation on prognosis of gastrointestinal stromal tumors. Cancer Res 1999;59:4297-300.
6. Medeiros F, Codess CL, Duensing A, Homick JL, Oliveira AM, Heinrich MC, et al. KIT-negative gastrointestinal stromal tumors: proof of concept and therapeutic implications. Am J Surg Pathol 2004;7:889-94.

*Gastrointestinal stromal tumor (FFPE), stained with c-Kit pharmDx, Code K1906 or K1907; 3+ staining.*



**c-Kit pharmDx for Manual Use**
IVD K1906 25 tests

**c-Kit pharmDx for Dako Autostainer**
IVD K1907 35 tests

### Facts about c-Kit pharmDx Kits

- FDA approved
- Utilizes the same antibody employed in the original Gleevec® clinical trial
- Proven test sensitivity and specificity lessens the burden of extensive validation by laboratory staff
- Clinically relevant protocol and interpretation guidelines based on comparison studies between the clinical trial assay and c-Kit pharmDx including retested specimens from the original clinical trials

### The c-Kit pharmDx kits were developed and validated for use with the following Dako accessory reagents.

Materials required, but not supplied:

- Wash Buffer 10x, Code S3006
- Dual Endogenous Enzyme Block, Code S2003
- Target Retrieval Solution, Code S1699 or S1700
- EnVision+/HRP, Rabbit, Code K4002 or K4003
- Liquid DAB+, Code K3467 or K3468
- Hematoxylin for Dako Autostainer, Code S3301 or S3302

# EGFR pharmDx Kits

Epidermal growth factor receptor (EGFR) is a transmembrane receptor encoded by the human *HER1* gene. EGFR is a member of the EGF/erbB receptor family of related growth factor receptors, which include HER2/erbB2 or neu, HER3/erbB3, and HER4/erbB4. The EGFR protein is expressed by a variety of normal cells and is thought to play an important role in the regulation of cell division and tumor growth. EGFR overexpression has been demonstrated in a variety of neoplasms.

EGFR pharmDx Kit is indicated as an aid in identifying colorectal cancer patients eligible for treatment with Erbitux® (cetuximab) or Vectibix™ (panitumumab).

**EGFR pharmDx Kit for Manual Use**
IVD K1492 35 tests

**EGFR pharmDx Kit for Dako Autostainer**
IVD K1494 50 tests

**Erbitux® (cetuximab)** is an IgG1 monoclonal antibody that exclusively targets the epidermal growth factor receptor. Erbitux® in combination with irinotecan is indicated for the treatment of patients with EGFR-expressing metastatic colorectal cancer after failure of irinotecan, including cytotoxic therapy.

**Vectibix™ (panitumumab)** is a recombinant, human IgG2 monoclonal antibody that binds specifically to the human epidermal growth factor receptor. Vectibix™ is indicated for the treatment of EGFR-expressing, metastatic colorectal carcinoma with disease progression on or following fluoropyrimidine-, oxaliplatin-, and irinotecan-containing chemotherapy regimens.

**The system is based on the consecutive application of:**

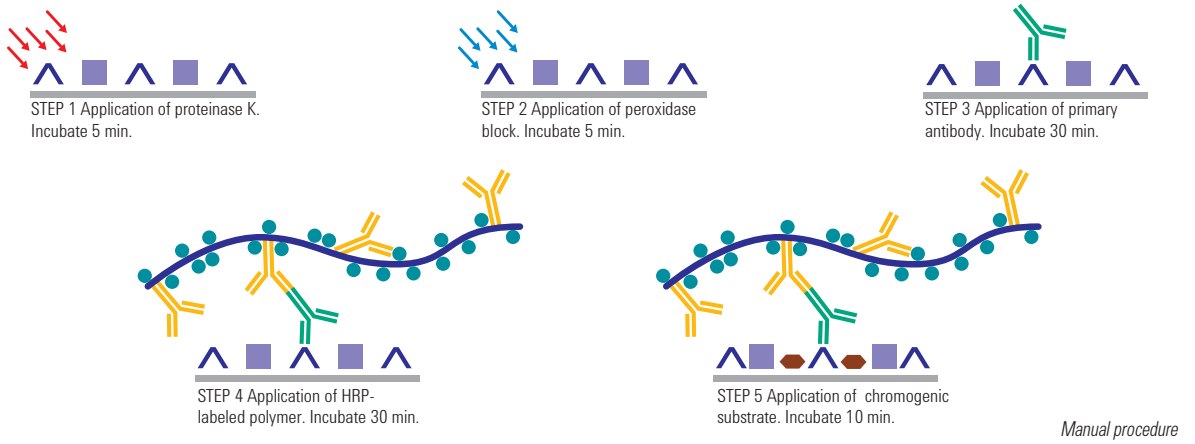
1. Primary antibody against EGFR
2. Peroxidase-labeled polymer
3. Chromogenic substrate

All reagents, control cell line slides, protocols and scoring guidelines are provided.

**EGFR pharmDx Kits offer:**

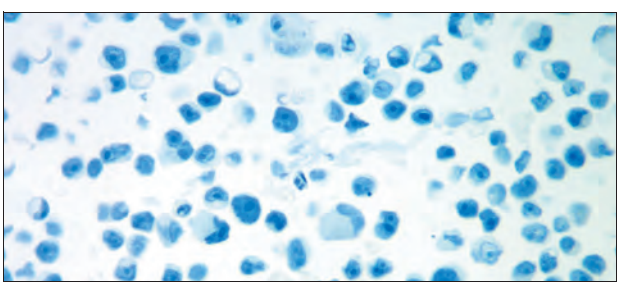
- Complete set of optimized reagents
- Reproducible IHC assay for identifying EGFR protein expression
- Performance control slides containing sections of formalin-fixed, paraffin-embedded cell lines that represent positive and negative levels of EGFR protein expression

## EGFR pharmDx Procedure

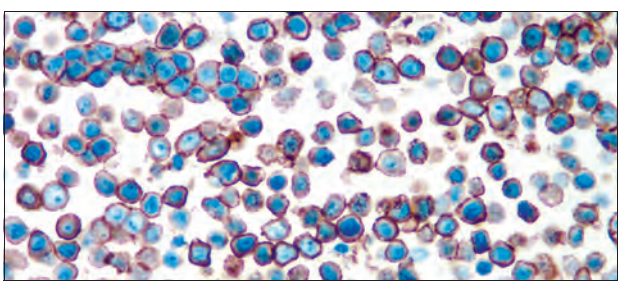



*Manual procedure*

## Control Cell Line Staining for Assay Validation



*0 control cell line CAMA-1. No staining of membrane is observed. 10x.*



*2+ control cell line HT-29. Moderate membrane staining is observed. 10x.*

# EGFR pharmDx Kits (continued)

**Facts about EGFR pharmDx Kit**

- FDA approved
- The assay specifically detects the EGFR (HER1) protein located on the cell membrane of EGFR-expressing cells

**Also available from Dako by request:**

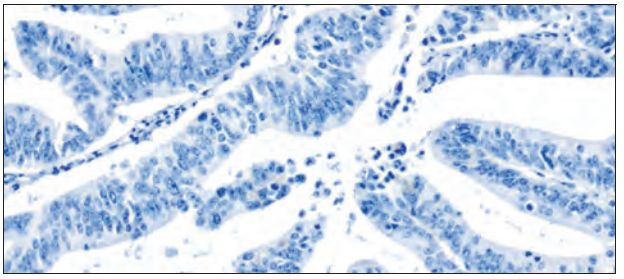
EGFR pharmDx Interpretation Manual, Order No. 08052

**EGFR pharmDx Kits include:**

- Proteinase K
- Peroxidase Block
- Monoclonal Mouse Antibody
- Mouse IgG1 Negative Control Reagent
- Peroxidase-Labeled Polymer
- Liquid DAB+ Chromogen
- DAB Substrate Buffer
- Wash Buffer 10x
- Control Slides

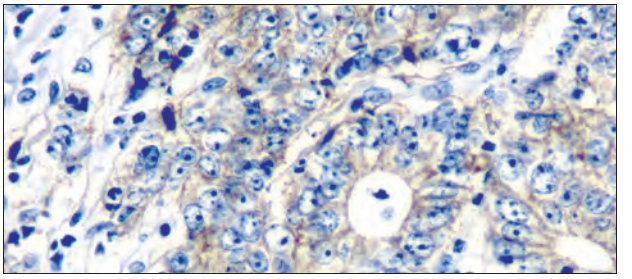
**Examples of tissues stained with EGFR pharmDx Kit**

EGFR **Negative**



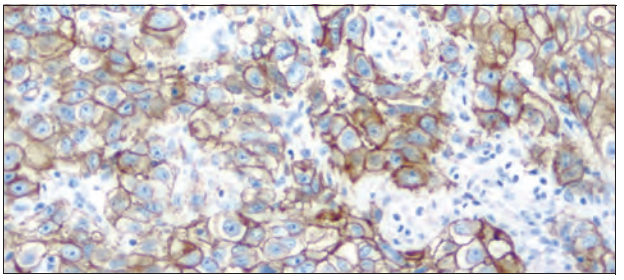
*Colorectal cancer, no membrane staining, 0 staining intensity.*

EGFR **Positive**



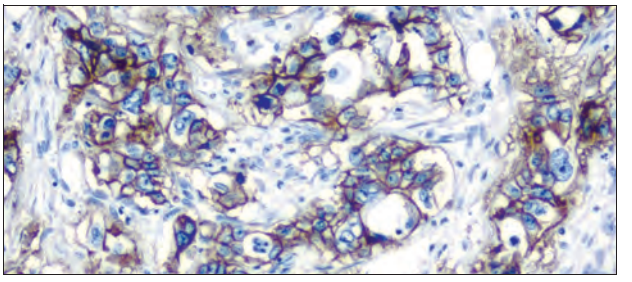
*Colorectal cancer, membrane staining, 1+ staining intensity.*

EGFR **Positive**



*Colorectal cancer, membrane staining, 2+ staining intensity.*

EGFR **Positive**



*Colorectal cancer, membrane staining, 3+ staining intensity.*

**Recommended counterstain**

- Hematoxylin for Dako Autostainer and Autostainer Plus, 500 mL, Code S3301

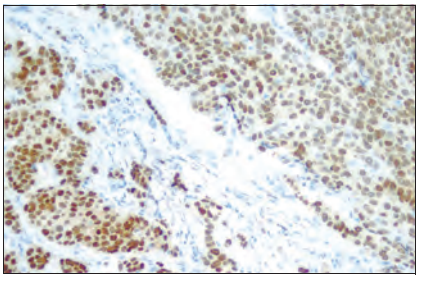
# ER/PR pharmDx Kits

Levels of steroid hormone receptors (estrogen and progesterone receptors) can aid in predicting which women are likely to benefit from hormone treatment. Treatment guidelines recommend measurement of steroid hormone receptors status in the diagnosis, prognosis, and treatment planning for women with breast cancer.

ER/PR pharmDx Kit is indicated as an aid in identifying patients eligible for treatment with anti-hormonal or aromatase inhibitor therapies as well as an aid in the prognosis and management of breast cancer.

**ER/PR pharmDx Kits For Automated Link Platforms**

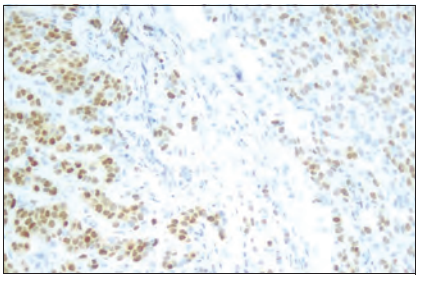
IVD SK310 For Automated Link Platforms 50 tests



*Estrogen receptor staining, 20x*
*(PS4) + (IS2) = TS6.*

**ER/PR pharmDx Kit for Dako Autostainer**

IVD K4071 For Dako Autostainer 50 tests



*Progesterone receptor staining, 20x*
*(PS3) + (IS1) = TS4.*

**ER/PR pharmDx Kit provides reliable results for ER and PR expression levels.**

- FDA cleared
- Highly specific ER antibody cocktail and PR antibody with demonstrated sensitivity and specificity (anti-ER, clones 1D5 and ER-2-123; anti-PR, clone PgR 1294)
- Optimized protocol with validated scoring system for the determination of ER/PR status applicable in the management of breast cancer patients (1-5)
- Concordance demonstrated between ER/PR pharmDx and an established method with positive/negative cut-off IHC score calibrated using samples with known biochemical and clinical response data
- Verified cut-off IHC score for ER/PR pharmDx assay
- Proven test sensitivity and specificity lessening the burden of extensive validation by laboratory staff

**ER/PR pharmDx Kits offer:**

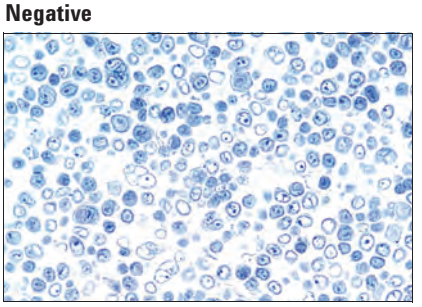
- Complete set of optimized reagents
- Ready-to-use antibodies and negative control reagent to ensure consistent sensitivity
- Control slides to validate each run

**Also available from Dako by request:**

ER/PR pharmDx Interpretation Manual, Order No. 28252

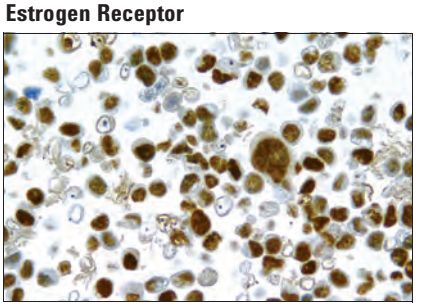
**ER/PR pharmDx Kit Control Slides**

**Negative**



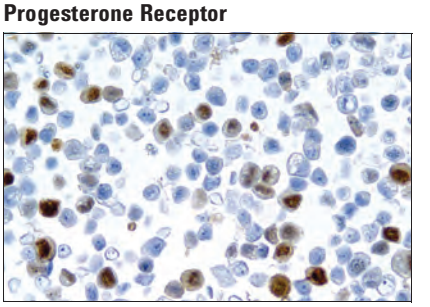
*HT-29; negative cell line control stained with ER/PR pharmDx Kit, 40x.*

**Estrogen Receptor**



*CAMA-1; positive cell line control stained with ER/PR pharmDx Kit, 40x.*

**Progesterone Receptor**



*CAMA-1; positive cell line control stained with ER/PR pharmDx Kit, 40x.*

# ER/PR pharmDx Kits (continued)



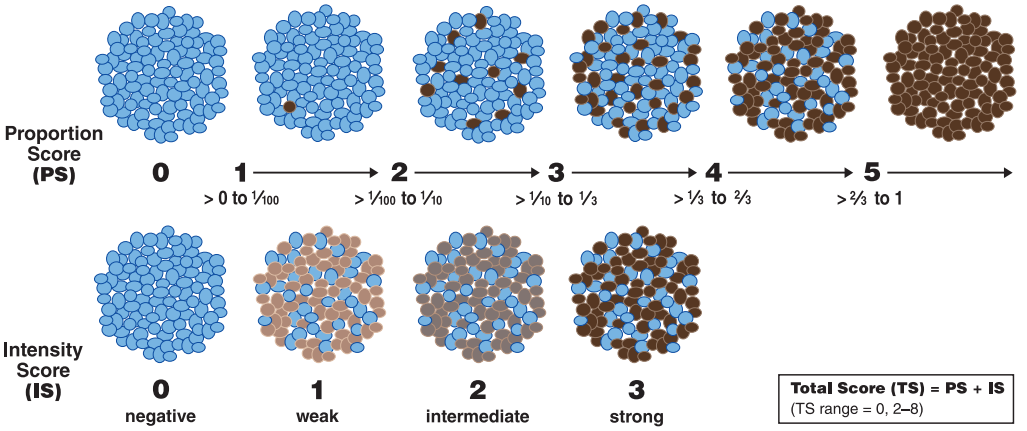
### ER/PR pharmDx Scoring System

ER/PR pharmDx Kit labels cell nuclei when using anti-ER and anti-PR. The immunostaining pattern in breast carcinoma is normally heterogeneous. Scoring is based on examination of all tumor cells on the slide.

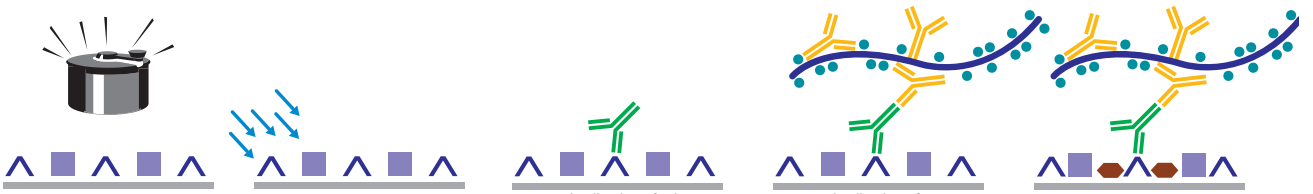
- A proportion score (PS) = estimated proportion of tumor cells with positive nuclear staining
- An intensity score (IS) = estimated average staining intensity of all positive tumor cells
- A total score (TS) = sum of PS and IS (0 or 2-8)
- A positive result for both ER and PR is defined as TS ≥ 3, which was validated in numerous large clinical studies (1-4)

### Allred Scoring Guideline

Scoring guidelines modified and used with the permission of D.C. Allred, M.D.




### ER/PR pharmDx Procedure



**STEP 1** Epitope retrieval in pressure cooker. Incubate 5 min. at 125 °C.

**STEP 2** Application of peroxidase block. Incubate 5 min.

**STEP 3** Application of primary antibody. Incubate 30 min.

**STEP 4** Application of visualization reagent. Incubate 30 min.

**STEP 5** Application of chromogenic substrate. Incubate 10 min.

### ER/PR pharmDx Kits include:

- Epitope Retrieval Solution
- Peroxidase-Blocking Reagent
- Mouse Anti-Human ER Cocktail
- Mouse Anti-Human PR
- Negative Control Reagent
- Visualization Reagent
- DAB+ Substrate Buffer
- DAB+ Chromogen
- Wash Buffer (10x)
- Control Slides
- User-Fillable Bottles (only included in Code SK310)

### Recommended counterstains

- Hematoxylin for Automated Link Platforms, 45 mL, Code SK308
- Hematoxylin for Dako Autostainer and Autostainer Plus, 500 mL, Code S3301

References:
1. Elledge RM, Green S, Pugh R, Allred DC, Clark GM, Hill J, et al. Estrogen receptor (ER) and progesterone receptor (PgR), by ligand-binding assay compared with ER, PgR and pS2, by immunohistochemistry in predicting response to tamoxifen in metastatic breast cancer: a Southwest Oncology Group Study. Int J Cancer 2000;89:111-7.
2. Allred DC, Harvey JM, Berardo M, Clark GM. Prognostic and predictive factors in breast cancer by immunohistochemical analysis. Mod Pathol 1998;11:155-68.
3. Harvey JM, Clark GM, Hilsenbeck SG, Osborne CKO, Allred DC: Immunohistochemistry is superior to ligand binding assay for evaluating estrogen receptor status in a study of 1,982 breast cancer patients. J Clin Oncol 1999;17:1474-81.
4. Mohsin SK,, Weiss H, Havighurst T, Clark GC, Bernardo M, Roanh LD, et al. Progesterone receptor by immunohistochemistry and clinical outcome in breast cancer: a validation study. Mod Pathol 2004;17:1545-54.
5. Phillips T, Murray G, Wakamiya K, Askaa J, Huang D, Welcher R, et al. Development of standard estrogen and progesterone receptor immunohistochemical assays for selection of patients for antihormonal therapy. Appl Immunohistochem Mol Morphol 2007;15:325-31.

# HercepTest Kits

HercepTest is a semi-quantitative immunohistochemical assay for determination of HER2 protein (c-erbB-2 oncoprotein) overexpression in breast cancer tissues routinely processed for histological evaluation and formalin-fixed, paraffin-embedded cancer tissue from patients with metastatic gastric or gastroesophageal junction adenocarcinoma. HercepTest specifically demonstrates overexpression of HER2 protein. HercepTest is indicated as an aid in the assessment of breast and gastric cancer patients for whom Herceptin® (trastuzumab) treatment is being considered and for breast cancer patients for whom PERJETA™ (pertuzumab) or KADCYLA™ (ado-trastuzumab emtansine) treatment is being considered (see Herceptin®, PERJETA™ and KADCYLA™ package inserts).



**HercepTest for Automated Link Platforms**
IVD SK001 50 tests

**HercepTest**
IVD K5204 35 tests

**HercepTest for Dako Autostainer**
IVD K5207 50 test

**The system is based on the consecutive application of:**

1. Primary antibody against HER2
2. Visualization reagent
3. Chromogenic substrate

All reagents, control cell line slides and detailed instructions are provided.

**HercepTest Kits are FDA approved and include:**

- Epitope Retrieval Solution
- Peroxidase Block
- Polyclonal Rabbit Anti-Human HER2 Protein
- Negative Control Reagent
- Peroxidase-labeled polymer
- Liquid DAB+ Chromogen
- DAB Substrate Buffer
- Wash Buffer 10x (not included in Code SK001)
- Control Slides
- User-Fillable Bottles (only included in Code SK001)

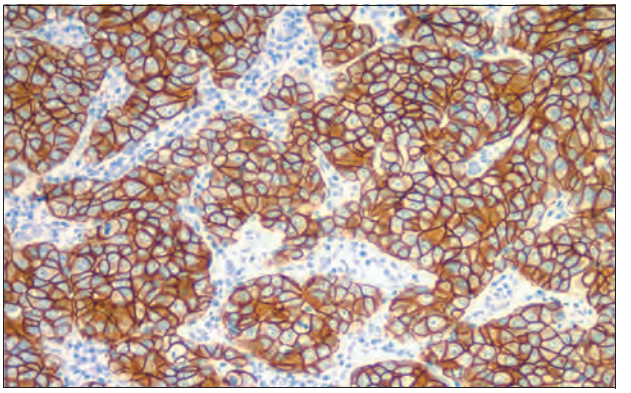
**Also available from Dako by request:**

**Breast cancer**

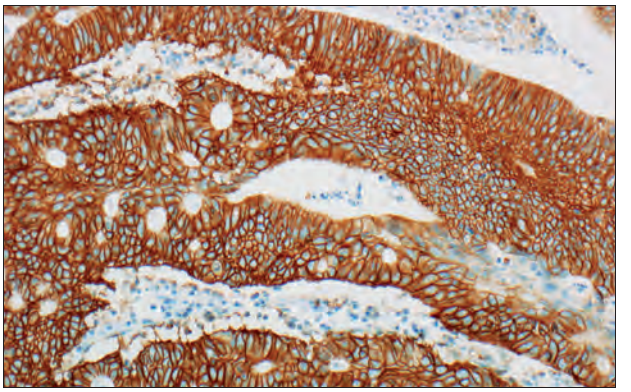
| | |
|---|---|
| Guidelines for Scoring HercepTest - Breast | Order No. 38602 |
| HercepTest Interpretation Manual - Breast | Order No. 29036 |

**Gastric cancer**

| | |
|---|---|
| Guidelines for Scoring HercepTest - Gastric | Order No. 38662 |
| HercepTest Interpretation Manual - Gastric | Order No. 29028 |



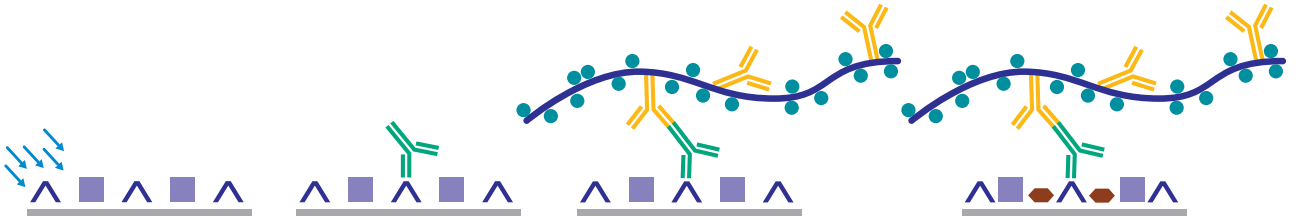
*Breast carcinoma (FFPE) stained with HercepTest, Code K5204, 3+ staining.*



*Gastric adenocarcinoma (FFPE) stained with HercepTest, Code K5204, 3+ staining.*

# HercepTest Kits (continued)

## HercepTest Procedure



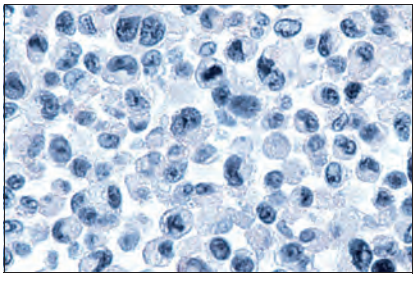
STEP 1 Application of peroxidase block. Incubate 5 min.

STEP 2 Application of primary antibody. Incubate 30 min.

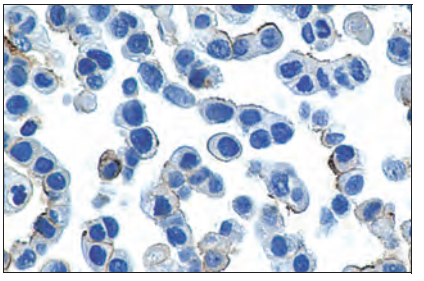
STEP 3 Application of HRP-labeled polymer. Incubate 30 min.

STEP 4 Application of chromogenic substrate. Incubate 10 min.

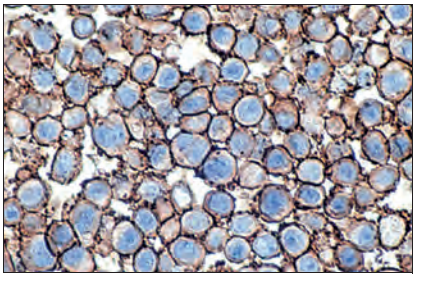
## Control Cell Lines for Staining Procedure Validation



*0 control cell line MDA-231. No staining of the membrane is observed. 20x.*



*1+ control cell line MDA-175. A faint perceptible staining of the membrane is observed. The cells exhibit incomplete membrane staining. 20x.*



*3+ control cell line SK-BR-3. A strong staining of the entire membrane is observed. 20x.*

## Recommended counterstains

- Hematoxylin for Automated Link Platforms, 45 mL, Code SK308
- Hematoxylin for Dako Autostainer and Autostainer Plus, 500 mL, Code S3301

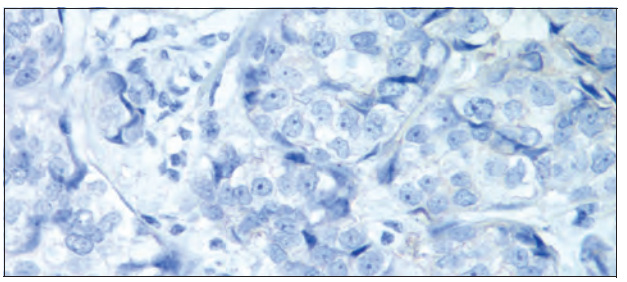
## Guidelines for HercepTest Interpretation - Breast Cancer

Only specimens from patients with invasive breast carcinoma should be scored. In cases with carcinoma in situ and invasive carcinoma in the same specimen, only the invasive component should be scored.

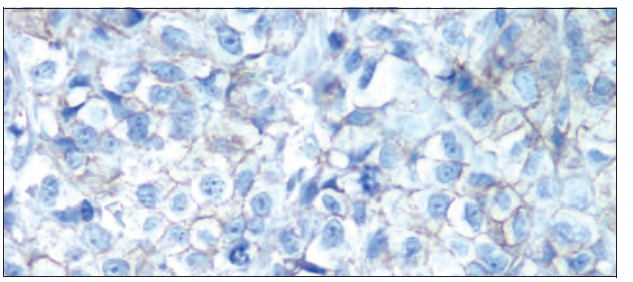
| Score to report | HER2 protein overexpression assessment | Staining pattern |
|---|---|---|
| 0 | Negative | No staining is observed, or faint membrane staining present in less than 10% of the tumor cells. |
| 1+ | Negative | A faint/barely perceptible membrane staining is detected in more than 10% of the tumor cells. The cells exhibit incomplete membrane staining. |
| 2+ | Weakly positive* | A weak to moderate complete membrane staining is observed in more than 10% of the tumor cells. |
| 3+ | Strongly Positive | A strong complete membrane staining is observed in more than 10% of the tumor cells. |

* Weakly positive cases (2+): May be considered equivocal and reflexed to ISH testing.

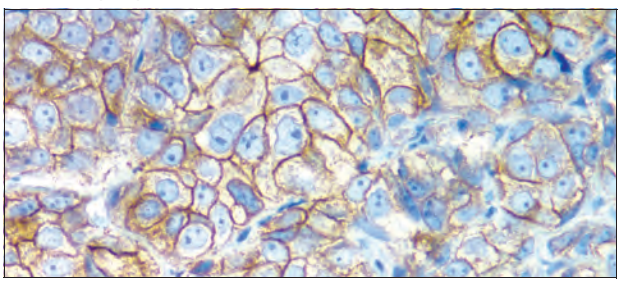
**Score: 0 (40x)**



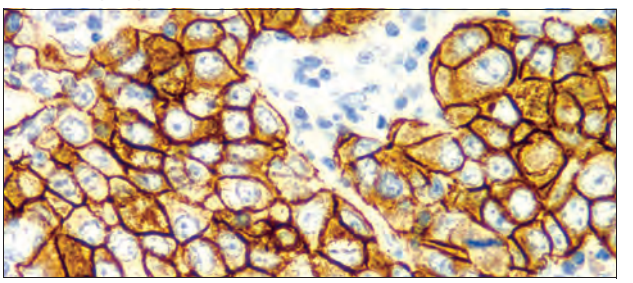
**Score: 1+ (40x)**



**Score: 2+ (40x)**



**Score: 3+ (40x)**



## Guidelines for HercepTest Interpretation - Gastric Cancer

Only specimens from patients with metastatic gastric or gastroesophageal junction adenocarcinoma should be scored. In cases with intestinal metaplasia and gastric adenocarcinoma in the same specimen, only the gastric (adenocarcinoma) component should be scored. HercepTest is interpreted as negative for HER2 protein overexpression (0 and 1+ staining intensity), equivocal (2+ staining intensity), and positive (3+ staining intensity).

**Guidelines for surgical specimens:**

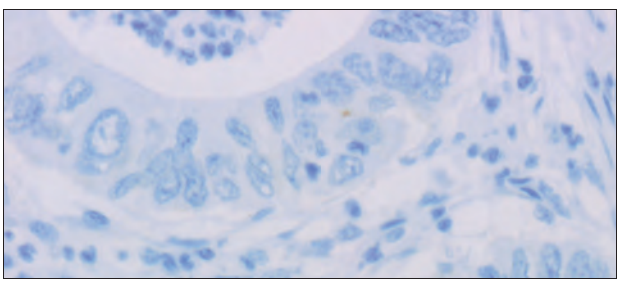
| Score to report | HER2 protein overexpression assessment | Staining pattern |
|---|---|---|
| 0 | Negative | No reactivity or membranous reactivity in < 10% of tumor cells |
| 1+ | Negative | Faint/barely perceptible membranous reactivity in ≥ 10% of tumor cells; cells are reactive only in part of their membrane |
| 2+ | Equivocal | Weak to moderate complete, basolateral or lateral membranous reactivity in ≥ 10% of tumor cells |
| 3+ | Positive | Strong complete, basolateral or lateral membranous reactivity in ≥ 10% of tumor cells |

**Guidelines for biopsy specimens:**

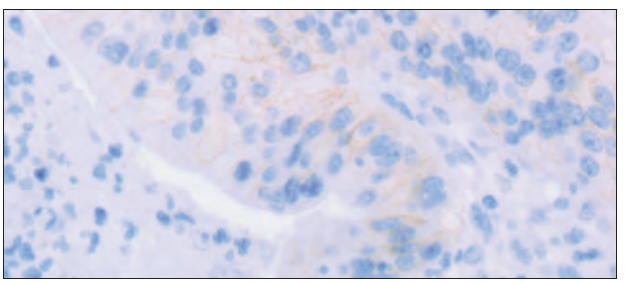
| Score to report | HER2 protein overexpression assessment | Staining pattern |
|---|---|---|
| 0 | Negative | No reactivity or no membranous reactivity in any (or < 5 clustered) tumor cells |
| 1+ | Negative | Tumor cell cluster (≥ 5 cells) with a faint/barely perceptible membranous reactivity irrespective of percentage of tumor cells stained |
| 2+ | Equivocal | Tumor cell cluster (≥ 5 cells) with a weak to moderate complete, basolateral or lateral membranous reactivity irrespective of percentage of tumor cells stained |
| 3+ | Positive | Tumor cell cluster (≥ 5 cells) with a strong complete, basolateral or lateral membranous reactivity irrespective of percentage of tumor cells stained |

Guidelines based on Hofmann M, Stoss O, Shi D, Büttner R, van de Vijver M, Kim W, et al. Assessment of a HER2 scoring system for gastric cancer: results from a validation study. Histopath 2008; 52:797–805.

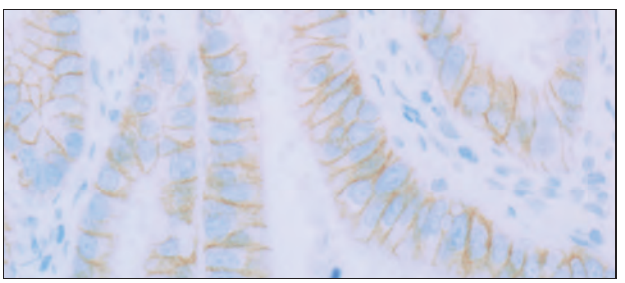
**Score: 0 (40x)**



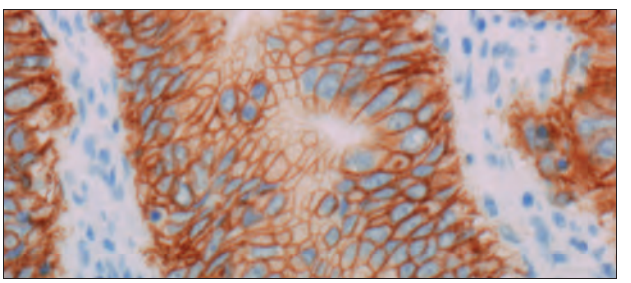
**Score: 1+ (40x)**



**Score: 2+ (40x)**



**Score: 3+ (40x)**



# *HER2* pharmDx Kits

The human *HER2* gene with the generic name *ERBB2* (also known as *NEU*) encodes the HER2 protein or p185$^{HER2}$. The HER2 protein is a membrane receptor tyrosine kinase with homology to the epidermal growth factor receptor (EGFR). The *HER2* gene is a normal component present in two copies in all normal diploid cells.

### Breast Cancer

In a fraction of patients (20-25%) with breast cancer, the *HER2* gene is amplified as a part of the process of malignant transformation and tumor progression. *HER2* gene amplification leads to overexpression of the HER2 protein on the surface of breast cancer cells.

*HER2* gene amplification and receptor prevalence correlates with poor breast cancer prognosis, including relapse-free and overall survival.

The recombinant, humanized monoclonal antibody trastuzumab (Herceptin®) was rationally developed to specifically target HER2-positive breast cancers. Demonstration of high HER2 overexpression or gene amplification is essential for treatment with Herceptin®. Clinical studies have shown that patients whose tumors have high HER2 receptor overexpression and/or amplification benefit most from Herceptin® (1).

Pertuzumab (PERJETA™) is a recombinant humanized monoclonal antibody that binds to sub-domain II of the extracellular part of the HER2 protein thereby blocking its ability to form heterodimers with other members of the HER family, including HER1 (EGFR), HER3 and HER4. PERJETA™ has shown to be effective and safe in the treatment of breast cancer patients with HER2 protein overexpression. During clinical studies of pertuzumab, HER2 overexpression was demonstrated directly by IHC or indirectly evidenced through correlation of *HER2* gene amplification to protein overexpression as demonstrated by FISH. However, in the randomized trial, data were available for a limited number of patients (8/808) for whom the FISH results were positive but the IHC results were negative (0, 1+) (2,3).

Ado-trastuzumab emtansine (KADCYLA™) is a novel antibody-drug conjugate specifically designed for the treatment of HER2-positive cancer. It is composed of the potent cytotoxic agent DM1 (a thiol-containing maytansinoid anti-microtubule agent) conjugated to trastuzumab via a linker molecule. Ado-trastuzumab emtansine binds to HER2 with an affinity similar to that of trastuzumab; such binding is required for its anti-tumor activity. It is hypothesized that after binding to HER2, ado-trastuzumab emtansine undergoes receptor-mediated internalization, followed by intracellular release of DM1 and subsequent cytotoxicity (4). A number of clinical studies have shown that ado-trastuzumab emtansine is effective and safe in treatment of HER2-positive breast cancer patients (5-8).

### Gastric Cancer

A number of studies have analysed HER2 overexpression in gastric cancer; one has reported 24% of patients with gastroesophageal adenocarcinomas as showing overexpression of HER2 (9).

Pre-clinical data has showed that trastuzumab has significant antitumor activity in gastric cancer (10). This finding has prompted the investigation of the potential clinical benefit of trastuzumab in this type of cancer. The results from the phase III trial (ToGA), where both HercepTest and *HER2* FISH pharmDx were used as initial screening tests, showed the added benefit of combining Herceptin® with standard chemotherapy (11).

**Precaution for gastric cancer:** HER2 protein overexpression and *HER2* gene amplification are not as correlated in gastric cancer as with breast cancer; therefore a single method should not be used to determine HER2 status.

### Kits

HercepTest was the first FDA-approved diagnostic kit designed to quickly and accurately assess HER2 protein status.

*HER2* CISH pharmDx Kit is an FDA-approved HER2 diagnostic kit combining the genetic information from FISH with the interpretation advantages of CISH.

*HER2* IQFISH pharmDx is the latest FDA-approved Dako HER2 diagnostic kit indicated as an aid in the assessment of *HER2* gene status.


References:

1. Bilous M, Dowsett M, Hanna W, Isola J, Lebeau A, Moreno A, et al. Current perspectives on HER2 testing: a review of national testing guidelines. Mol Pathol 2003;16:173-82.
2. Baselga J, Gelmon KA, Verma S, et al. Phase II trial of pertuzumab and trastuzumab in patients with human epidermal growth factor receptor 2-positive metastatic breast cancer that progressed during prior trastuzumab therapy. J Clin Oncol 2010;28:1138-44.
3. Baselga J, Cortés J, Kim SB, Im SA, Hegg R, Im YH, et al. Pertuzumab plus trastuzumab plus docetaxel for metastatic breast cancer. N Engl J Med 2012;366:109-19.
4. Lewis Phillips GD, Li G, Dugger DL, et al. Targeting HER2-positive breast cancer with trastuzumab-DM1, an antibody-cytotoxic drug conjugate. Cancer Res 2008;68:9280-90.
5. Krop IE, Beeram M, Modi S, et al. Phase I study of trastuzumab-DM1, an HER2 antibody-drug conjugate, given every 3 weeks to patients with HER2-positive metastatic breast cancer. J Clin Oncol 2010;28:2698-704.
6. Burris HA 3rd, Rugo HS, Vukelja SJ, et al. Phase II study of the antibody drug conjugate trastuzumab-DM1 for the treatment of human epidermal growth factor receptor 2 (HER2)-positive breast cancer after prior HER2-directed therapy. J Clin Oncol 2011;29:398-405.
7. Krop IE, Lorusso P, Miller KD, et al. A phase II study of trastuzumab emtansine in patients with human epidermal growth factor receptor 2-positive metastatic breast cancer who were previously treated with trastuzumab, lapatinib, an anthracycline, a taxane, and capecitabine. J Clin Oncol 2012;30:3234-41.
8. Verma S, Miles D, Gianni L, Krop IE, Welslau M, Baslega J, et al,. Trastuzumab emtansine for HER2-positive advanced breast cancer. New Engl J Med 2012;367:1783-91.
9. Tanner M, Hollmén M, Junttila TT, Kapanen AI, Tommola S, Soini Y, et al. Amplification of *HER-2* in gastric carcinoma: association with *Topoisomerase IIα* gene amplification, intestinal type, poor prognosis and sensitivity to trastuzumab. Ann Oncol 2005;16:273-8.
10. Fujimoto-Ouchy K, Sekiguchi F, Yasuno H, Moriya Y, Mori K, Tanaka Y. Antitumor activity of trastuzumab in combination with chemotherapy in human gastric cancer xenograft models. Cancer Chemother Pharmacol 2007;59:795-805.
11. Van Cutsem E, Kang Y, Chung H, et al. Efficacy results from the ToGA trial: a phase III study of trastuzumab added to standard chemotherapy (CT) in first-line human epidermal growth factor receptor 2 (HER2)-positive advanced gastric cancer (GC). J Clin Oncol 2009;18S:Abstract LBA4509.

### IQFISH – One day turnaround time for FISH

When it comes to cancer diagnosis, time is everything. The time required to run tests can restrict the laboratory's workflow and delay results from being handed over to the pathologist. Time is one of the key parameters of successful laboratory operations. Of course, laboratory professionals do everything they can to speed up operations, but they always reach a point where there is nothing more they can do. But now they can.

| ***HER2* IQFISH pharmDx** | | |
|---|---|---|
| IVD | K5731 | 20 tests |

*HER2* IQFISH pharmDx is a direct fluorescence in situ hybridization (FISH) assay based on Dako's new fast IQISH hybridization buffer chemistry. The IQISH hybridization buffer is non-toxic and allows genomic DNA probe hybridization to be performed in just 60-120 minutes. The short hybridization time results in a turnaround time less than 4 hours for a complete FISH staining from deparaffinization to mounting.

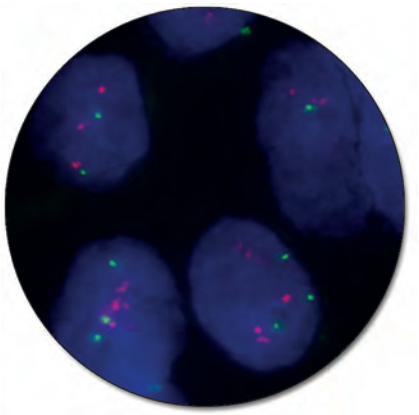
*HER2* IQFISH pharmDx is designed to quantitatively determine *HER2* gene amplification in formalin-fixed, paraffin-embedded (FFPE) breast cancer tissue specimens and FFPE specimens from patients with adenocarcinoma of the stomach, including gastro-esophageal junction. *HER2* IQFISH pharmDx with the indication adenocarcinoma of the stomach, including the gastroesophageal junction, is not available in all markets. Gene amplification is determined from the ratio between the number of signals from the hybridization of the *HER2* gene probe (red signals) and the number of signals from the hybridization of the CEN-17 reference chromosome 17 probe (green signals).

*HER2* IQFISH pharmDx is indicated as an aid in the assessment of breast and gastric cancer patients for whom Herceptin® treatment is being considered and for breast cancer patients for whom PERJETA™ or KADCYLA™ treatment is being considered (see Herceptin®, PERJETA™, and KADCYLA™ package inserts). For breast cancer patient, results from the *HER2* IQFISH pharmDx are intended for use as an adjunct to the information currently used for estimating prognosis in stage II, node-positive breast cancer patients.

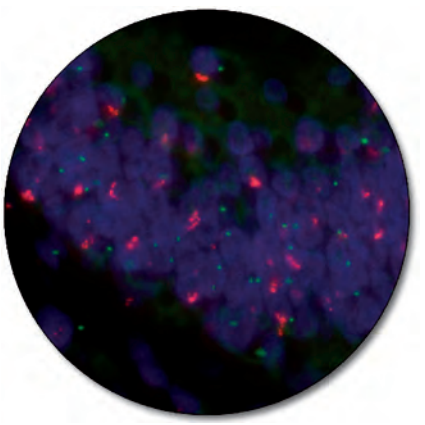
*HER2* IQFISH pharmDx is a complete system providing all reagents required to perform 20 FISH assays. This includes pre-treatment reagents, *HER2* and CEN-17 reference chromosome 17 probe mix in IQISH hybridization buffer, buffers and mounting medium. A standard validated procedure and validated interpretation guidelines are also provided.

*HER2* IQFISH pharmDx, Code K5731, is CE marked and FDA approved.





*Breast carcinoma (FFPE) stained with HER2 IQFISH pharmDx, Code K5731. Tumor cells show HER2 gene amplification (HER2/CEN-17 ratio ≥2).*



*Gastric cancer (FFPE) stained with HER2 IQFISH pharmDx, Code K5731. Tumor cells show HER2 gene amplification (HER2/CEN-17 ratio ≥2).*

## Features

**Turnaround time**
- Less than 4 hours total protocol
- Run FISH simultaneously with IHC
- Solve urgent cases fast
- Easy planning improves workflow

**Non-toxic solution**
- Safer work environment
- No need for hybridization in fume hoods
- Flexible planning

**Excellent quality**
- Crisp and clear dual fluorescent signals
- Robust and easy protocol
- Accurate answer, first time
- Accurate answer, every time

**Easy protocol**
- Easy protocol improves workflow
- Optional batch pepsin treatment for high throughput

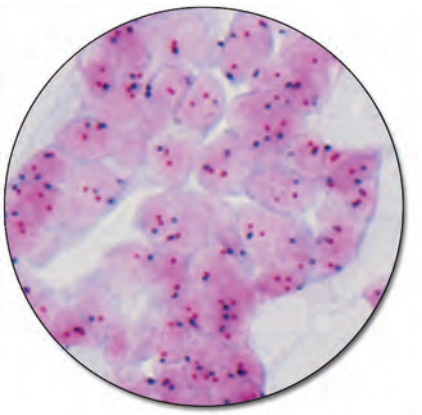
# *HER2* pharmDx Kits (continued)

| ***HER2* CISH pharmDx Kit** | | |
|---|---|---|
| IVD | SK109 | 20 tests |

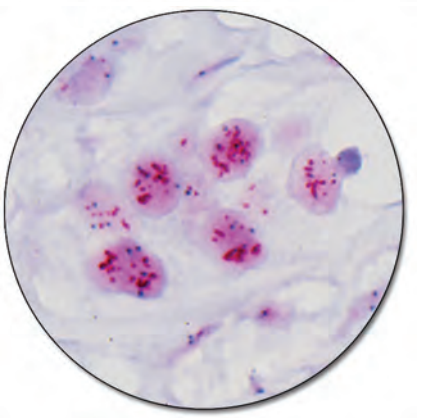
*HER2* CISH pharmDx Kit is a dual color chromogenic assay designed to quantitatively determine *HER2* gene amplifications in formalin-fixed, paraffin-embedded breast cancer tissue specimens using bright field microscopy. Gene amplification is determined from the ratio between the number of signals from the visualization of the *HER2* gene probe (red signals) and the number of signals from the reference chromosome 17 probe (blue signals).

*HER2* CISH pharmDx Kit is indicated as an aid in the assessment of patients for whom Herceptin™ treatment is being considered. Results from the *HER2* CISH pharmDx are intended for use as an adjunct to the information currently used for estimating prognosis in stage II, node-positive breast cancer patients.
*HER2* CISH pharmDx Kit is a complete system providing all reagents required to perform 20 CISH assays. This includes pre-treatment reagents, *HER2* and reference chromosome 17 probe mix, peroxidase mix, CISH antibody mix, red and blue chromogens, substrate buffers and mounting media. A standard validated procedure and validated interpretation manual are also provided.

*HER2* CISH pharmDx Kit, Code SK109, is CE marked and FDA approved.



*Breast carcinoma (FFPE) with non-amplified HER2 gene status stained with HER2 CISH pharmDx Kit, Code SK109.*



*Breast carcinoma (FFPE) with amplified HER2 gene status stained with HER2 CISH pharmDx Kit, Code SK109.*

## Features

### Chromogenic dual color visualization

- Allows fast and convenient method for scoring
- Improves scoring ratios accuracy due to counting both *HER2* gene signals and centromere signals in the same cells on one slide
- Distinguishes true gene amplifications or deletions from chromosomal aneuploidy

### Preservation of morphology

- Enables easy and fast identification of invasive tissue and internal control

### Interpretation by bright field microscopy

- Saves the expense and the required use of a fluorescence microscope
- Stained sections can be stored at room temperature without loss of signals
- Provides the opportunity to archive and re-evaluate at any time

# PD-L1 IHC 22C3 pharmDx

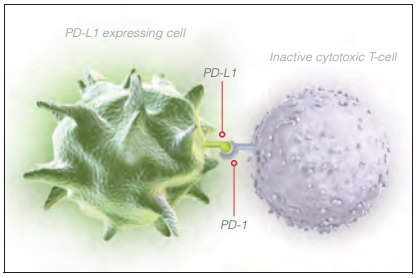
## PD-L1 Testing - Advancing Treatment Options

### The immune system and role of PD-L1 protein

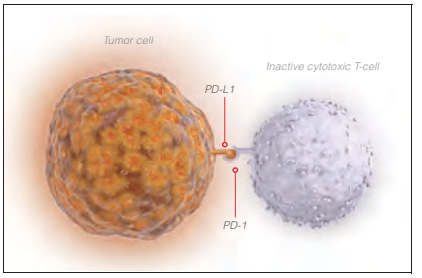
- Cytotoxic T cells work to detect and eliminate infected cells and tumor cells from the body
- To limit damage to surrounding tissue, normal cells differentiate themselves by expressing a protein signal called PD-L1 (programmed death ligand 1). This signal is similar to a warning sign and is designed to avoid elimination of normal cells.
- T cells detect the PD-L1 signal through a receptor called PD-1 (programmed death receptor 1)

### Tumor involvement and role of PD-1-targeted therapy

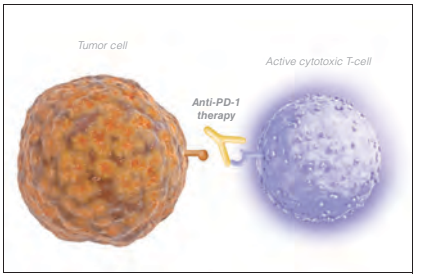
- Some tumors can also express the PD-L1 signal to mimic normal cells and escape elimination
- Anti-PD-1 therapy works by blocking the PD-1 receptor that detects the PD-L1 signal in tumor cells
- Identifying PD-L1 expression on tumor cells is important in identifying the signal needed to assess which patients will respond better to anti-PD-1 therapy




*Inactivation of T cells limits damage to normal tissue.*




*Inactivation of T cells reduces tumor cell death and elimination.*




*Blocking the PD-1/PD-L1 interaction helps to enable active T cells and tumor cell death and elimination.*

**PD-L1 IHC 22C3 pharmDx for Autostainer Link 48**

IVD SK006 For Autostainer Link 48 **NEW** 50 tests

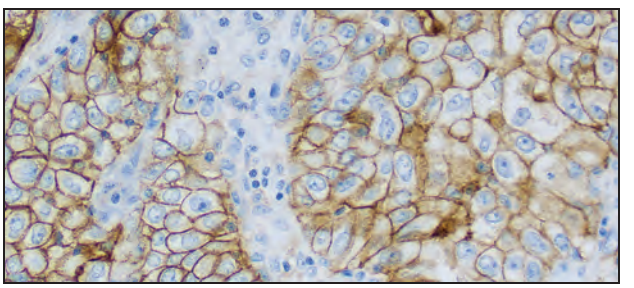
PD-L1 IHC 22C3 pharmDx is a qualitative immunohistochemical assay using Monoclonal Mouse Anti-PD-L1, Clone 22C3 intended for use in the detection of PD-L1 protein in formalin-fixed, paraffin-embedded (FFPE) non-small cell lung cancer (NSCLC) tissue using EnVision FLEX visualization system on Autostainer Link 48. PD-L1 protein expression is determined by using Tumor Proportion Score (TPS), which is the percentage of viable tumor cells showing partial or complete membrane staining. The specimen should be considered PD-L1 positive if TPS ≥ 50% of the viable tumor cells exhibit membrane staining at any intensity.

PD-L1 IHC 22C3 pharmDx is indicated as an aid in identifying NSCLC patients for treatment with KEYTRUDA® (pembrolizumab).

The kit includes reagents required for the immunohistochemical staining (except wash buffer), control slides representing different expression levels of PD-L1 protein, and detailed instructions. The kit has been tailored especially for use on Autostainer Link 48 instruments. The materials provided are sufficient for 50 tests (50 slides incubated with monoclonal mouse antibody to PD-L1 and 50 slides incubated with the corresponding negative control reagent, 100 slides in total).


Reference:

1. Garon EB, Rizvi NA, Hui R, Leighl N, Balmanoukian AS, Eder JP, et al. Pembrolizumab for the treatment of non-small cell lung cancer. New Eng J Med 2015;372:2018-28.

*Non-small cell lung carcinoma (FFPE) with PD-L1 High Expression stained with PD-L1 IHC 22C3 pharmDx, Code SK006.*

### The system is based on the consecutive application of:

1. Primary antibody against PD-L1
2. Visualization reagent
3. Chromogenic substrate

All reagents, control cell line slides and detailed instructions are provided.

### PD-L1 IHC 22C3 pharmDx kit is FDA approved and includes:

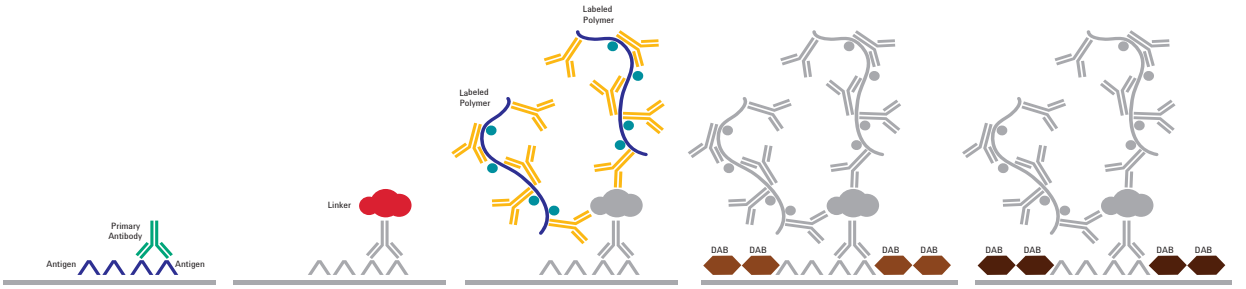
- Peroxidase-Blocking Reagent
- Monoclonal Mouse Anti-PD-L1, Clone 22C3
- Negative Control Reagent
- Mouse LINKER
- Visualization Reagent-HRP
- DAB+ Substrate Buffer
- DAB+ Chromogen
- DAB Enhancer
- EnVision FLEX Target Retrieval Solution, Low pH (50x)
- PD-L1 IHC 22C3 pharmDx Control Slides

### Reagents required but not included in kit

- EnVision FLEX Wash Buffer (20x) K8007
- EnVision FLEX Hematoxylin K8008

# PD-L1 IHC 22C3 pharmDx (continued)

## PD-L1 IHC 22C3 Procedure
### Graphical representation of assay steps




STEP 1 Application of Primary Antibody.

STEP 2 Application of Linker.

STEP 3 Application of Visualization Reagent.

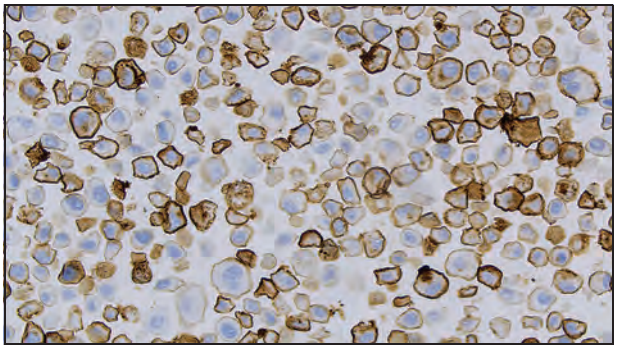
STEP 4 Application of DAB+ Substrate Chromogen Solution.

STEP 5 Application of DAB Enhancer.

## Control cell lines

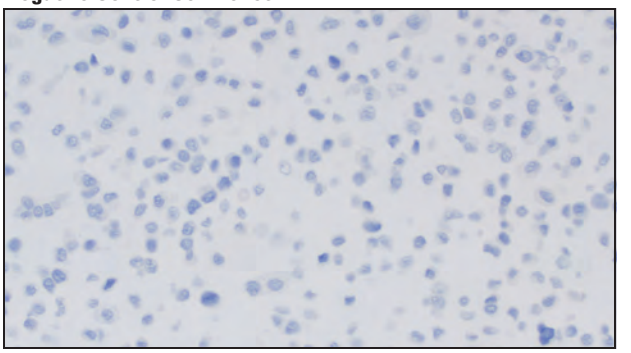
Control slides are provided to help validate the staining runs which enhance the confidence in results. They are not to be used as an interpretation reference.

### Positive Control Cell Pellet



*Acceptable staining of positive pellet. At least 70% of the cells contain cell membrane staining of at least 2+ average staining intensity. Any background staining is less than 1+ staining intensity. 20x magnification.*

### Negative Control Cell Pellet

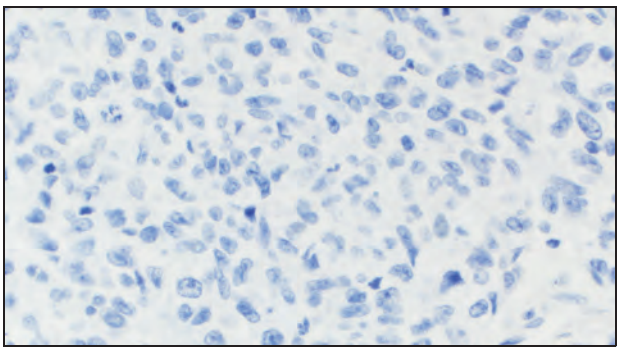


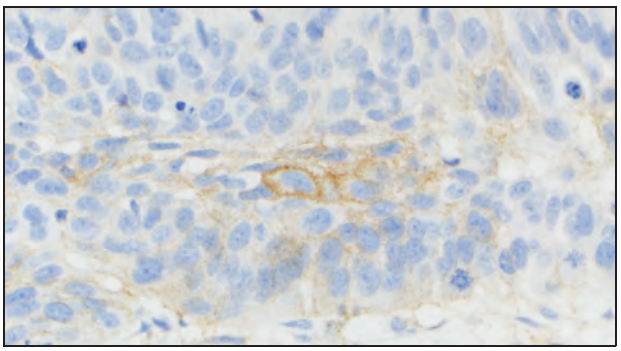
*Acceptable staining of negative pellet. The majority of cells should demonstrate no staining. The presence of 10 or less cells with distinct cell membrane staining is acceptable. Any background staining is less than 1+ staining intensity. 20x magnification.*

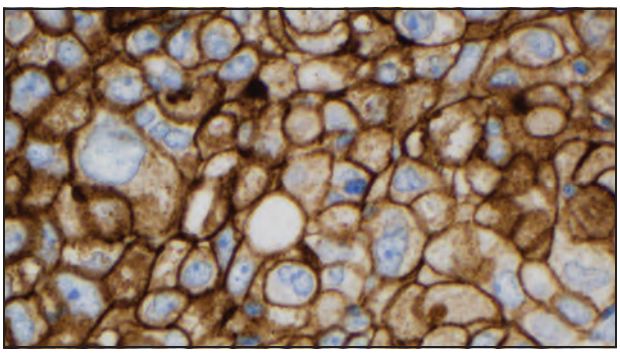
**Tumor Proportion Score**
PD-L1 protein expression is determined by using Tumor Proportion Score (TPS), which is the percentage of viable tumor cells showing partial or complete membrane staining.
NSCLC patient specimens should be considered positive for PD-L1 expression if TPS ≥ 50% of the of viable tumor cells exhibit membrane staining at any intensity (i.e. ≥ 1+). These patients may be considered for treatment with KEYTRUDA® (pembrolizumab).

**PD-L1 staining definition**
PD-L1 staining is any perceptible (≥ 1+) partial or complete cell membrane staining of viable tumor cells.

**Interpretation of PD-L1 expression**
Patient specimens tested with PD-L1 IHC 22C3 pharmDx are interpreted as having No Expression, Low Expression, or High Expression of PD-L1. The percentage of viable tumor cells showing partial or complete cell membrane staining, the tumor proportion score, determines the PD-L1 expression status of the specimen.
See Dako Interpretation Manual for complete interpretation of PD-L1 IHC 22C3 pharmDx staining results, Order No. 29111.


*No Expression (TPS < 1%).*


*Low Expression (TPS ≥ 1–49%).*


*High Expression (TPS ≥ 50%).*

**Make the right choice**
Make the right test choice for assessing KEYTRUDA® (pembrolizumab) eligibility

- Use the same test employed in the KEYTRUDA® clinical studies
- Incorporate PD-L1 testing early
- Utilize our extensive education and training resources to incorporate PD-L1 testing in your laboratory
- Clinically validated assay and scoring guidelines for KEYTRUDA® eligibility
- Includes all reagents necessary to perform a complete staining run
- Includes positive and negative control cell line slides to validate staining run

# PD-L1 IHC 28-8 pharmDx

## The role of CTLA-4 and PD-1/PD-L1 pathways in cancer

### Normal cells limit damage to healthy tissue

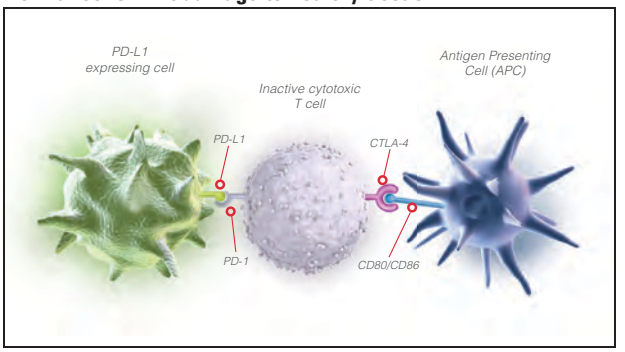



*Figure 1. Inactivation of T cells limits damage to healthy tissue.*

### Tumor cells escape detection

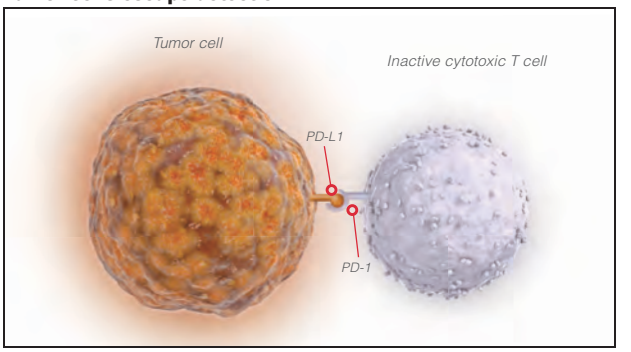



*Figure 2. Inactivation of T cells reduces tumor cell killing.*

### CTLA-4 therapy augments T cell activation and proliferation

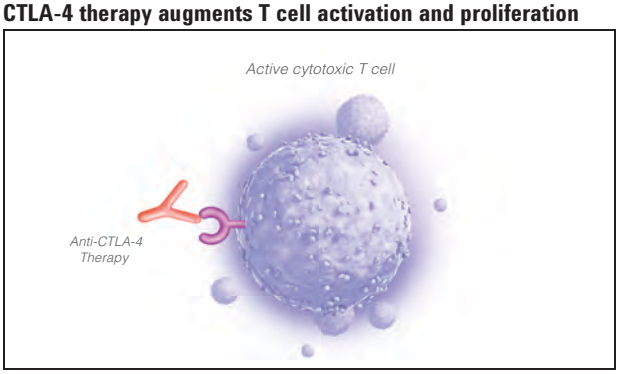



*Figure 3. Blocking CTLA-4 contributes to an increase in anti-tumor immune response.*

### PD-1 therapies harness the immune response to fight tumors

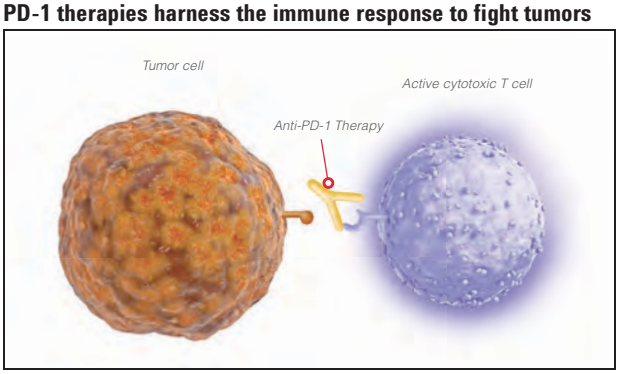



*Figure 4. Blocking PD-1 enables cytotoxic T cells to actively remove tumor cells.*

**PD-L1 IHC 28-8 pharmDx for Autostainer Link 48**

| | | | | |
|---|---|---|---|---|
| IVD | SK005 | For Autostainer Link 48 | **NEW** | 50 tests |

PD-L1 IHC 28-8 pharmDx is a qualitative immunohistochemical assay using Monoclonal Rabbit Anti-PD-L1, Clone 28-8 intended for use in the detection of PD-L1 protein in formalin-fixed paraffin-embedded (FFPE) non-squamous non-small cell lung cancer (NSCLC) and melanoma tissues using EnVision FLEX visualization system on Autostainer Link 48. PD-L1 protein expression is defined as the percentage of tumor cells exhibiting positive membrane staining at any intensity.

*Non-squamous NSCLC*
PD-L1 expression as detected by PD-L1 IHC 28-8 pharmDx in non-squamous NSCLC may be associated with enhanced survival from OPDIVO® (nivolumab).

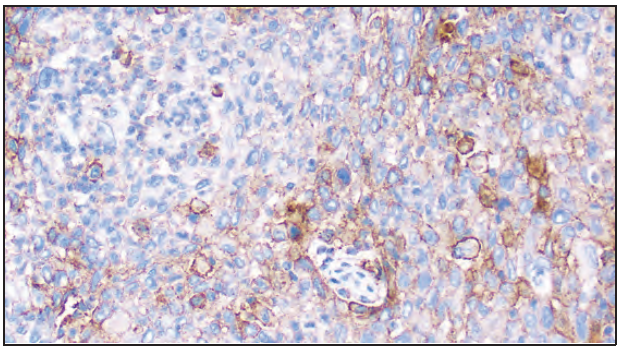
*Melanoma*
Positive PD-L1 status as determined by PD-L1 IHC 28-8 pharmDx in melanoma is correlated with the magnitude of the treatment effect on progression-free survival from OPDIVO®.

*PD-L1 IHC 28-8 pharmDx kit*
The kit includes reagents required for the immunohistochemical staining (except wash buffer), control slides representing different expression levels of PD-L1 protein, and detailed instructions. The kit has been tailored especially for use on Autostainer Link 48 instruments. The materials provided are sufficient for 50 tests (50 slides incubated with monoclonal rabbit antibody to PD-L1 and 50 slides incubated with the corresponding Negative Control Reagent, 100 slides in total).

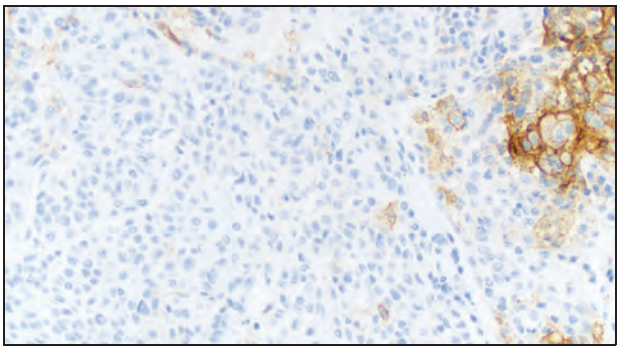
PD-L1 IHC 28-8 pharmDx is subject to an exclusive trademark license to Dako Denmark A/S. OPDIVO® is a trademark owned by Bristol-Myers Squibb.

Reference:
1. Phillips T, Simmons P, Inzunza HD, Cogswell J, Novotny J Jr, Taylor C, et al. Development of an automated PD-L1 immunohistochemistry (IHC) assay for non-small cell lung cancer. Appl Immunohistochem Mol Morphol 2015;23:541-9.

# PD-L1 IHC 28-8 pharmDx (continued)



*Non-squamous NSCLC (FFPE) stained with PD-L1 IHC 28-8 pharmDx, Code SK005. PD-L1 expression ≥ 10%.*



*Melanoma (FFPE) stained with PD-L1 IHC 28-8 pharmDx, Code SK005. PD-L1 expression ≥ 1%.*

## Kit components

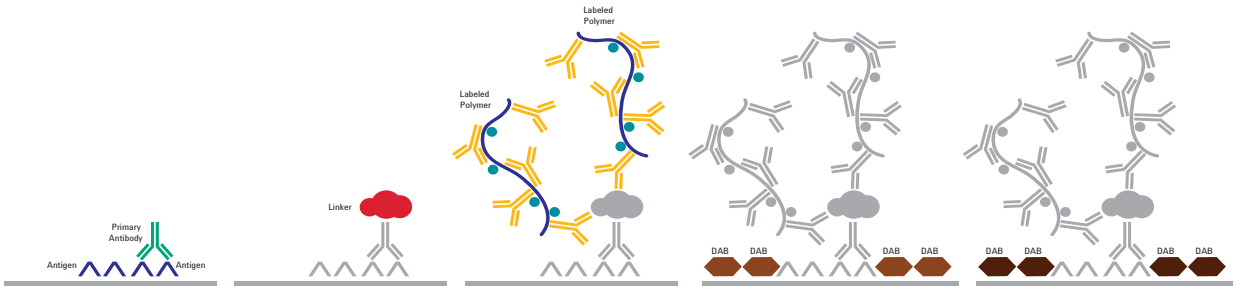
Dako PD-L1 IHC 28-8 pharmDx is a complete kit with reagents sufficient for 50 tests (50 slides incubated with primary antibody to PD-L1 and 50 slides incubated with the corresponding negative control reagent) and 15 Control Slides for use on Autostainer Link 48.

- EnVision FLEX Target Retrieval Solution, Low pH (50x)
- Peroxidase-Blocking Reagent
- Monoclonal Rabbit Anti-PD-L1, Clone 28-8
- Negative Control Reagent
- Anti-Rabbit LINKER
- Visualization Reagent-HRP
- DAB+ Substrate Buffer
- DAB+ Chromogen
- DAB Enhancer
- Control Slides

## Reagents required but not included in kit

- EnVision FLEX Wash Buffer (20x) K8007
- EnVision FLEX Hematoxylin K8008

## PD-L1 IHC 28-8 pharmDx Procedure
## Graphical representation of assay steps




STEP 1 Application of Primary Antibody.

STEP 2 Application of Linker.

STEP 3 Application of Visualization Reagent.

STEP 4 Application of DAB+ Substrate Chromogen Solution.

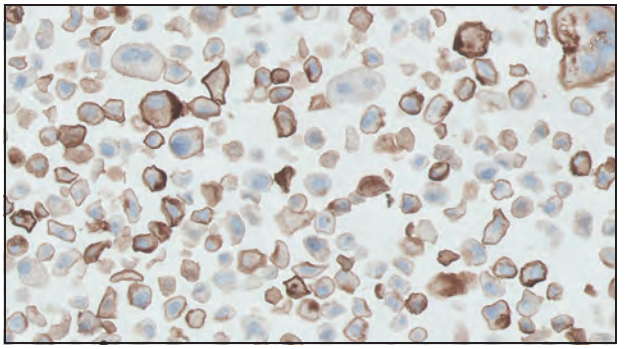
STEP 5 Application of DAB Enhancer.

# PD-L1 IHC 28-8 pharmDx (continued)

## Control cell lines

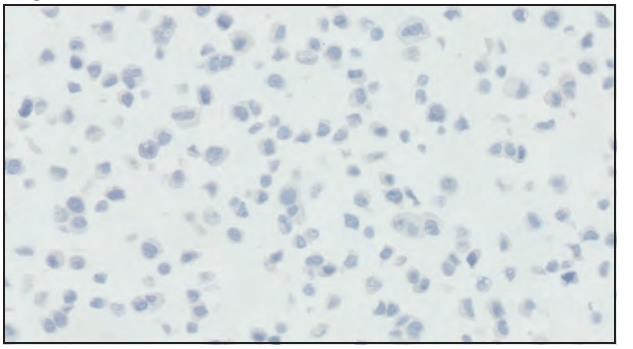
Control slides are provided to help validate the staining runs which enhance the confidence in results. They are not to be used as an interpretation reference.

### Positive Control Cell Pellet



*Acceptable staining of positive pellet. At least 80% of the cells contain plasma membrane staining of at least 2+ average staining intensity. Any background staining is of less than 1+ staining intensity.*

### Negative Control Cell Pellet

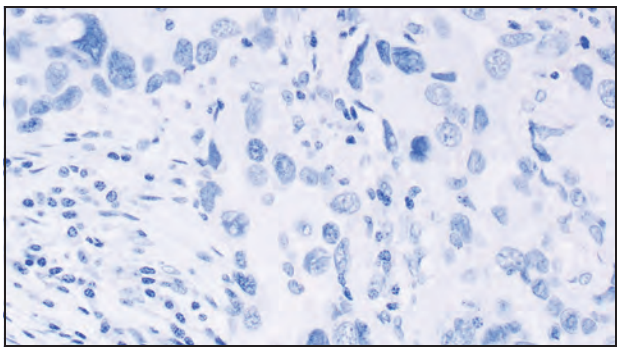


*Acceptable staining of negative pellet. No plasma membrane staining . Any background staining is of less than 1+ staining intensity. Staining of a few cells in the negative pellet may occasionally be observed. The presence of 10 or less cells with distinct plasma membrane staining, or cytoplasmic staining with ≥ 1 + intensity within the boundaries of the cell pellet are acceptable.*

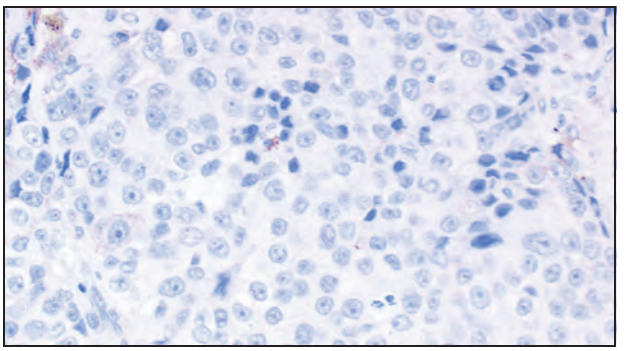
## Interpretation of Test Results in non-squamous NSCLC

To assess the PD-L1 expression level in patient slides stained with PD-L1 IHC 28-8 pharmDx, pathologists should determine the percentage of viable tumor cells exhibiting partial or complete linear circumferential plasma membrane staining at any staining intensity.

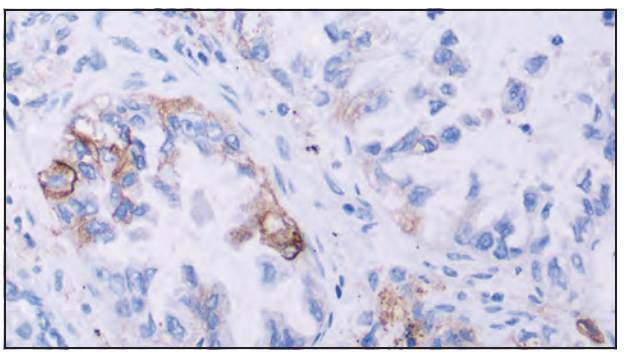
See Dako Interpretation Manual for complete interpretation of PD-L1 IHC 28-8 pharmDx staining results, Order No. 29211.



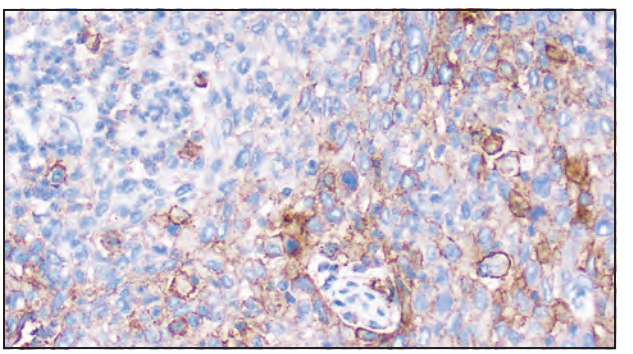
*PD-L1 expression < 1%.*



*PD-L1 expression ≥ 1%.*



*PD-L1 expression ≥ 5%.*

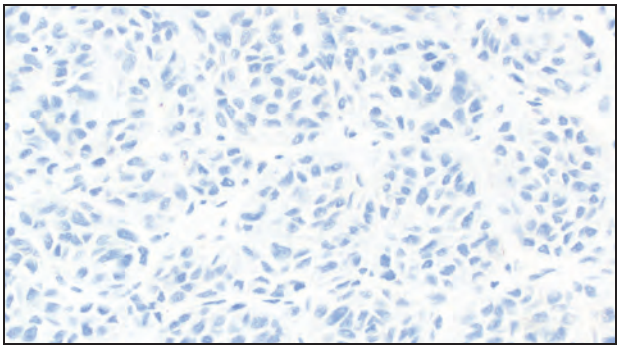


*PD-L1 expression ≥ 10%.*

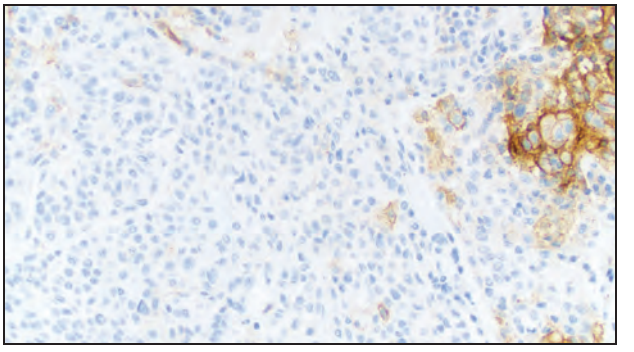
### Interpretations of Melanoma

Positive PD-L1 status is correlated with the magnitude of the treatment effect on progression-free survival from OPDIVO®. Specimen is considered positive if ≥ 1% of melanoma cells exhibit linear circumferential complete or partial membrane staining of PD-L1. Specimen is considered negative if < 1% of melanoma cells exhibiting linear circumferential complete or partial membrane staining of PD-L1.

See Dako Interpretation Manual Melanoma for complete interpretation of PD-L1 IHC 28-8 pharmDx staining results, Order No. 29120.



*< 1% of the viable tumor cells exhibit complete circumferential or partial linear plasma membrane staining at any intensity. PD-L1 expression < 1%: NEGATIVE.*



*≥ 1% of the viable tumor cells exhibit complete circumferential or partial linear plasma membrane staining at any intensity. PD-L1 expression ≥ 1%: POSITIVE.*

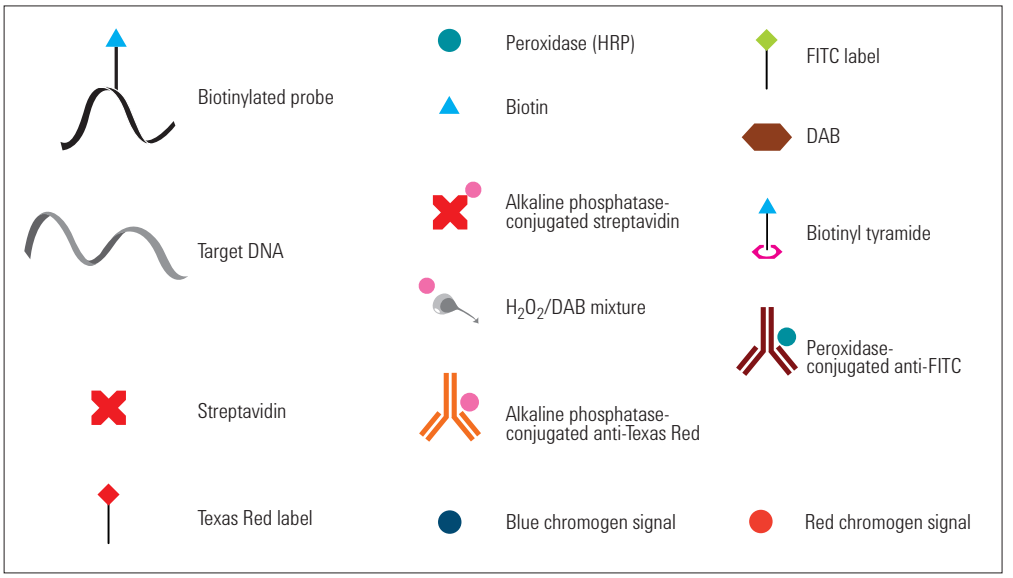
### Key benefits of PD-L1 IHC 28-8 pharmDx

- The only FDA-approved test for PD-L1 expression associated with enhanced survival with OPDIVO® for non-squamous NSCLC
- The first and only FDA approved PD-L1 test for use in the assessment of the magnitude of treatment effect on progression-free survival in melanoma patients from OPDIVO®

### Experience the easy integration of PD-L1 in your IHC workflow

- Integrate PD-L1 IHC 28-8 pharmDx without changing staining lab workflow
- Ready-to-use reagents and cell line controls optimized for Autostainer Link 48
- Pre-programmed, validated protocol

# Molecular Pathology


Biotinylated probe
Target DNA
Streptavidin
Texas Red label
Peroxidase (HRP)
Biotin
Alkaline phosphatase-conjugated streptavidin
$H_2O_2$/DAB mixture
Alkaline phosphatase-conjugated anti-Texas Red
Blue chromogen signal
FITC label
DAB
Biotinyl tyramide
Peroxidase-conjugated anti-FITC
Red chromogen signal

# Introduction to Molecular Pathology

## A Complete FISH Run in Just 4 Hours

The recently introduced Dako technology* completely changed the rules of in situ hybridization. The IQFISH pharmDx kit build on a strong history of Dako assays. And now, for the first time ever, laboratory professionals can run DNA-based hybridization assays in a timeframe comparable to protein-based immunohistochemistry assays.

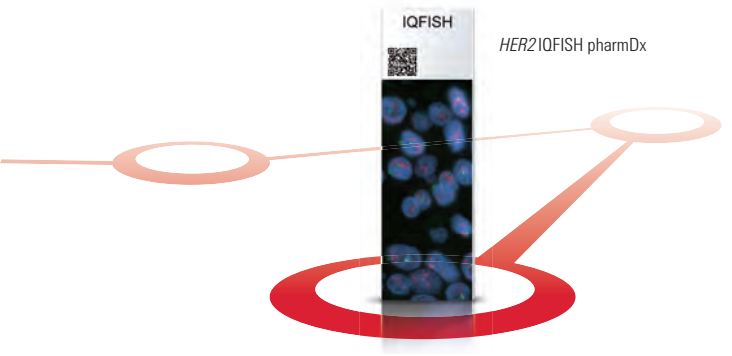
The IQISH hybridization buffer is non-toxic and allows genomic DNA probe hybridization to be performed outside a fume hood in just 60-120 minutes. The short hybridization time results in a turnaround time of about 4 hours for a complete FISH staining from deparaffinization to mounting.

* Patents pending

**Instant Quality FISH. The name says it all.**
The new IQ buffer from Dako completely changes the rules of in situ hybridization.

**Improved overall staining quality**

- Accurate quantification
- Easy identification of cancer cells
- Crisp and clear signals




## SureFISH* - The Next Generation FISH Technology

Fluorescence in situ hybridization (FISH) is a laboratoy procedure in which fluorescently labeled DNA fragments (the FISH probe) hybridize to complementary DNA sequences in the cell's nucleus. The resulting fluorescent signals are visualized using a microscope and indicate the presence and localization of one or more targeted DNA sequences.

- **Brightness:** New oligo design algorithm and labeling chemistry enable brighter probes compared to competing BAC FISH probes
- **Background:** Oligo FISH probes target regions that are repeat free, enabling low background and minimal cross hybridization

## Oligonucleotide-Based FISH Probes

The unique SureFISH DNA FISH probes are designed in silico and chemically synthesized using the company's high-fidelity, oligonucleotide library synthesis (OLS) technology. This eliminates the limitations of FISH probes manufactured with bacterial artificial chromosome (BAC) technology.

- **Balance:** Oligo FISH technology provides total flexibility on size of targeted region and number of oligos, enabling optimal signal balance between child probes
- **Co-localized:** Unique micro-gap design leads to tight co-localization of child probes, enabling quick and accurate analysis

* SureFISH probes are manufactured by Agilent Technologies, Inc.

# Hybridizer Instrument

| Hybridizer | | | |
|---|---|---|---|
| IVD | S2450 | 110-120 volt★ | 1 unit |
| IVD | S2451 | 200-240 volt★★ | 1 unit |

Hybridizer is a hands-free co-denaturation and hybridization instrument designed for slide-based fluorescence (FISH) and chromogenic (CISH) in situ hybridization. The system reduces the manual steps, and improves the efficiency, throughput and precision compared to manually performed conventional ISH procedures. Hybridizer has a 12-slide capacity and heats and cools the slides through two temperature ranges with short ramp times. The system is easy to program for a wide range of protocols and is optimized for Dako DNA and PNA probes for FISH and CISH.

| Hybridizer Humidity Control Strips | | | |
|---|---|---|---|
| IVD | S2452 | For the Hybridizer instrument | 20 strips |

Hybridizer Humidity Control Strips are specially designed for the Hybridizer instrument, and ensure a controlled high humidity during the in situ hybridization procedure. The strips consist of a special hydrophilic polymer fibre material with high surface area and the ability to quickly adsorb and desorb moisture. The strips should be replaced frequently, every 1-2 weeks, as the performance deteriorates over time and with use.

## Hardware Specifications

| | |
|---|---|
| Slide capacity | Up to 12 slides per run |
| Program capacity | Up to 40 programs (names and numbers) |
| Program types | Denaturation and hybridization<br>Hybridization only<br>Fixed temperature |
| Humidity control system | Hydrophobic polymer fiber system |
| Temperature uniformity | +/- 1 °C or better |
| Denaturation temperature | 50-99 °C, 0-30 minutes. |
| Hybridization temperature | Room temperature, 30-70 °C, 0-99 hours |
| Fixed temperature | Room temperature, 30-99 °C, 0-99 hours |
| Ramp time | 37-95 °C in less than 1 minute |
| Cooling time | 95-45 °C in less than 6 minutes |
| Dimensions | 9" W x 6" D x 5" H (22.8 cm W x 40.6 cm D x 12.7 cm H) |
| Weight | 18 lbs (8 kg) |
| Ambient operating temperature | 15-40 °C |
| Pre-set voltage | 100-120 V or 220-240 V |
| Frequency | 50-60 Hz |


★ Not available in the EU
★★ Not available in the United States

# CISH and FISH Kits

In situ hybridization techniques are used to localize specific nucleic acid sequences within the DNA in cells in tissues or cytological preparations, on chromosomes, or in whole mounts. Development of non-radioactive probes and detection systems has made the ISH technology available to a wide variety of routine and research applications. We have developed kits for both FISH and CISH applications.

The IQFISH technology* reduces the hybridization time from 14-20 hours to 1-2 hours. The IQISH hybridization buffer is non-toxic and allows genomic DNA probe hybridization to be performed in just 60-120 minutes. The short hybridization time results in a turnaround time of about 4 hours for a complete FISH staining from deparaffinization to mounting.

* Patents pending

## Overview of Dako FISH and CISH Kits

### FISH Kit

| ***HER2*** **IQFISH pharmDx (20 tests), Code K5731** |
|---|
| Pre-treatment Solution (20x) |
| Pepsin, ready-to-use |
| Pepsin Diluent (10x) |
| ***HER2*/CEN-17 Probe Mix in IQISH buffer** |
| Stringent Wash Buffer (20x) |
| Wash Buffer (20x) |
| Fluorescence Mounting Medium, containing DAPI |
| Coverslip Sealant |

### CISH Kit

| ***HER2*** **CISH pharmDx Kit (20 tests), Code SK109** |
|---|
| Pre-treatment Solution (20x) |
| Pepsin, ready-to-use |
| ***HER2*/CEN-17 Probe Mix** |
| Stringent Wash Buffer (20x) |
| Peroxidase Block |
| **CISH Antibody Mix** |
| Red and Blue Chromogens |
| Red and Blue Substrate Buffers |
| Wash Buffer (20x) and Wash Buffer (10x) |
| CISH Mounting medium |
| Coverslip Sealant |

### Accessory Kits

| **Histology FISH Accessory Kits (20 tests), Code K5799** |
|---|
| Pre-treatment Solution (20x) |
| Pepsin, ready-to-use |
| Pepsin Diluent (10x) |
| Stringent Wash Buffer (20x) |
| Wash Buffer (20x) |
| Fluorescence Mounting Medium, containing DAPI |
| Coverslip Sealant |

| **Cytology FISH Accessory Kits (20 tests), Code K5499** |
|---|
| Stringent Wash Buffer (20x) |
| Wash Buffer (20x) |
| Fluorescence Mounting Medium, containing DAPI |
| Coverslip Sealant |

# *HER2* pharmDx Kits

The human *HER2* gene with the generic name *ERBB2* (also known as *NEU*) encodes the HER2 protein or p185$^{HER2}$. The HER2 protein is a membrane receptor tyrosine kinase with homology to the epidermal growth factor receptor (EGFR). The *HER2* gene is a normal component present in two copies in all normal diploid cells.

### Breast Cancer

In a fraction of patients (20-25%) with breast cancer, the *HER2* gene is amplified as a part of the process of malignant transformation and tumor progression.

*HER2* gene amplification and receptor prevalence correlates with poor breast cancer prognosis, including relapse-free and overall survival.

The recombinant, humanized monoclonal antibody trastuzumab (Herceptin®) was rationally developed to specifically target HER2-positive breast cancers. Demonstration of high HER2 overexpression or gene amplification is essential for treatment with trastuzumab (Herceptin®). Clinical studies have shown that patients whose tumors have high HER2 receptor overexpression and/or amplification benefit most from Herceptin® (1).

Pertuzumab (PERJETA™) is a recombinant humanized monoclonal antibody that binds to sub-domain II of the extracellular part of the HER2 protein thereby blocking its ability to form heterodimers with other members of the HER family, including HER1 (EGFR), HER3 and HER4. PERJETA™ has shown to be effective and safe in the treatment of breast cancer patients with HER2 protein overexpression. During clinical studies of pertuzumab, HER2 overexpression was demonstrated directly by IHC or indirectly evidenced through correlation of *HER2* gene amplification to protein overexpression as demonstrated by FISH. However, in the randomized trial, data were available for a limited number of patients (8/808) for whom the FISH results were positive but the IHC results were negative (0, 1+) (2,3).

Ado-trastuzumab emtansine (KADCYLA™) is a novel antibody-drug conjugate specifically designed for the treatment of HER2-positive cancer. It is composed of the potent cytotoxic agent DM1 (a thiol-containing maytansinoid anti-microtubule agent) conjugated to trastuzumab via a linker molecule. Ado-trastuzumab emtansine binds to HER2 with an affinity similar to that of trastuzumab; such binding is required for its anti-tumor activity. It is hypothesized that after binding to HER2, ado-trastuzumab emtansine undergoes receptor-mediated internalization, followed by intracellular release of DM1 and subsequent cytotoxicity (4). A number of clinical studies have shown that ado-trastuzumab emtansine is effective and safe in treatment of HER2-positive breast cancer patients (5-8).

### Gastric Cancer

A number of studies have analysed HER2 overexpression in gastric cancer; one has reported 24% of patients with gastroesophageal adenocarcinomas as showing overexpression of HER2 (9).

Pre-clinical data has showed that trastuzumab has significant antitumor activity in gastric cancer (10). This finding has prompted the investigation of the potential clinical benefit of trastuzumab in this type of cancer. The results from the phase III trial (ToGA), where both HercepTest and *HER2* FISH pharmDx were used as initial screening tests, showed the added benefit of combining Herceptin® with standard chemotherapy (11).

**Precaution for gastric cancer:** HER2 protein overexpression and *HER2* gene amplification are not as correlated in gastric cancer as with breast cancer; therefore a single method should not be used to determine HER2 status.

### Kits

*HER2* IQFISH pharmDx is an FDA-approved Dako HER2 diagnostic kit indicated as an aid in the assessment of *HER2* gene status.

*HER2* CISH pharmDx Kit is an FDA-approved HER2 diagnostic kit combining the genetic information from FISH with the interpretation advantages of CISH.


References:

1. Bilous M, Dowsett M, Hanna W, Isola J, Lebeau A, Moreno A, et al. Current perspectives on HER2 testing: a review of national testing guidelines. Mol Pathol 2003;16:173-82.
2. Baselga J, Gelmon KA, Verma S, et al. Phase II trial of pertuzumab and trastuzumab in patients with human epidermal growth factor receptor 2-positive metastatic breast cancer that progressed during prior trastuzumab therapy. J Clin Oncol 2010;28:1138-44.
3. Baselga J, Cortés J, Kim SB, Im SA, Hegg R, Im YH, et al. Pertuzumab plus trastuzumab plus docetaxel for metastatic breast cancer. N Engl J Med 2012;366:109-19.
4. Lewis Phillips GD, Li G, Dugger DL, et al. Targeting HER2-positive breast cancer with trastuzumab-DM1, an antibody-cytotoxic drug conjugate. Cancer Res 2008;68:9280-90.
5. Krop IE, Beeram M, Modi S, et al. Phase I study of trastuzumab-DM1, an HER2 antibody-drug conjugate, given every 3 weeks to patients with HER2-positive metastatic breast cancer. J Clin Oncol 2010;28:2698-704.
6. Burris HA 3rd, Rugo HS, Vukelja SJ, et al. Phase II study of the antibody drug conjugate trastuzumab-DM1 for the treatment of human epidermal growth factor receptor 2 (HER2)-positive breast cancer after prior HER2-directed therapy. J Clin Oncol 2011;29:398-405.
7. Krop IE, Lorusso P, Miller KD, et al. A phase II study of trastuzumab emtansine in patients with human epidermal growth factor receptor 2-positive metastatic breast cancer who were previously treated with trastuzumab, lapatinib, an anthracycline, a taxane, and capecitabine. J Clin Oncol 2012;30:3234-41.
8. Verma S, Miles D, Gianni L, Krop IE, Welslau M, Baslega J, et al,. Trastuzumab emtansine for HER2-positive advanced breast cancer. New Engl J Med 2012;367:1783-91.
9. Tanner M, Hollmén M, Junttila TT, Kapanen AI, Tommola S, Soini Y, et al. Amplification of *HER-2* in gastric carcinoma: association with *Topoisomerase IIα* gene amplification, intestinal type, poor prognosis and sensitivity to trastuzumab. Ann Oncol 2005;16:273-8.
10. Fujimoto-Ouchy K, Sekiguchi F, Yasuno H, Moriya Y, Mori K, Tanaka Y. Antitumor activity of trastuzumab in combination with chemotherapy in human gastric cancer xenograft models. Cancer Chemother Pharmacol 2007;59:795-805.
11. Van Cutsem E, Kang Y, Chung H, et al. Efficacy results from the ToGA trial: a phase III study of trastuzumab added to standard chemotherapy (CT) in first-line human epidermal growth factor receptor 2 (HER2)-positive advanced gastric cancer (GC). J Clin Oncol 2009;18S:Abstract LBA4509.

# *HER2* pharmDx Kits (continued)

## IQFISH – One day turnaround time for FISH

When it comes to cancer diagnosis, time is everything. The time required to run tests can restrict the laboratory's workflow and delay results from being handed over to the pathologist. Time is one of the key parameters of successful laboratory operations. Of course, laboratory professionals do everything they can to speed up operations, but they always reach a point where there is nothing more they can do. But now they can.

**_HER2_ IQFISH pharmDx**

IVD K5731 20 tests

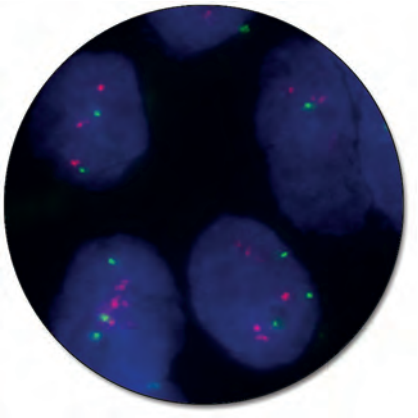
*HER2* IQFISH pharmDx is a direct fluorescence in situ hybridization (FISH) assay based on Dako's new fast IQISH hybridization buffer chemistry. The IQISH hybridization buffer is non-toxic and allows genomic DNA probe hybridization to be performed in just 60-120 minutes. The short hybridization time results in a turnaround time less than 4 hours for a complete FISH staining from deparaffinization to mounting.

*HER2* IQFISH pharmDx is designed to quantitatively determine *HER2* gene amplification in formalin-fixed, paraffin-embedded (FFPE) breast cancer tissue specimens and FFPE specimens from patients with metastatic gastric or gastroesophageal junction adenocarcinoma. Gene amplification is determined from the ratio between the number of signals from the hybridization of the *HER2* gene probe (red signals) and the number of signals from the hybridization of the CEN-17 reference chromosome 17 probe (green signals).

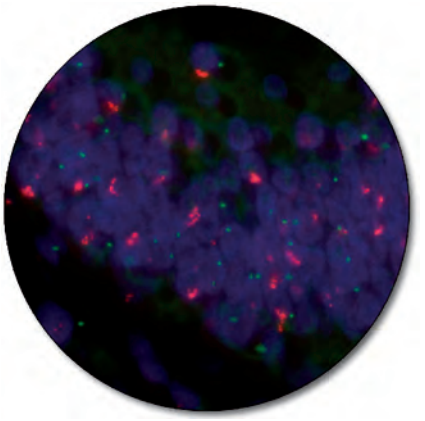
*HER2* IQFISH pharmDx is indicated as an aid in the assessment of breast and gastric cancer patients for whom Herceptin® treatment is being considered and for breast cancer patients for whom PERJETA™ or KADCYLA™ treatment is being considered (see Herceptin®, PERJETA™, and KADCYLA™ package inserts). For breast cancer patient, results from the *HER2* IQFISH pharmDx are intended for use as an adjunct to the information currently used for estimating prognosis in stage II, node-positive breast cancer patients.

*HER2* IQFISH pharmDx is a complete system providing all reagents required to perform 20 assays. A validated procedure and validated interpretation guidelines are also provided.

*HER2* IQFISH pharmDx, Code K5731, is CE marked and FDA approved.



*Breast carcinoma (FFPE) stained with HER2 IQFISH pharmDx, Code K5731. Tumor cells show HER2 gene amplification (HER2/CEN-17 ratio ≥2).*



*Gastric cancer (FFPE) stained with HER2 IQFISH pharmDx, Code K5731. Tumor cells show HER2 gene amplification (HER2/CEN-17 ratio ≥2).*

## Features

### Turnaround time

- Less than 4 hours total protocol
- Run FISH simultaneous with IHC
- Solve urgent cases fast
- Easy planning improves workflow

### Non-toxic solution

- Safer work environment
- Hybridization outside a fume hood
- Flexible planning

### Excellent quality

- Crisp and clear dual fluorescent signals
- Robust and easy protocol
- Correct answer, first time
- Correct answer, every time

### Easy protocol

- Easy protocol improves workflow
- Optional batch pepsin treatment for high throughput

# *HER2* pharmDx Kits (continued)

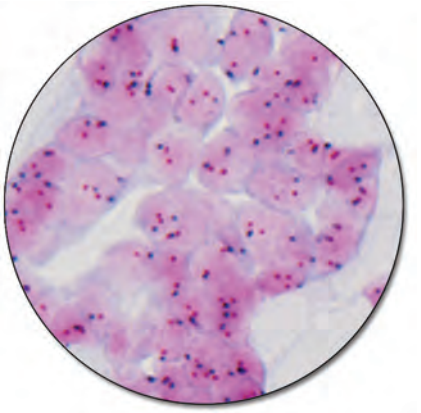
| ***HER2* CISH pharmDx Kit** | | |
|---|---|---|
| IVD | SK109 | 20 tests |

*HER2* CISH pharmDx Kit is a dual color chromogenic assay designed to quantitatively determine *HER2* gene amplifications in formalin-fixed, paraffin-embedded breast cancer tissue specimens using bright field microscopy. Gene amplification is determined from the ratio between the number of signals from the visualization of the *HER2* gene probe (red signals) and the number of signals from the reference chromosome 17 probe (blue signals).

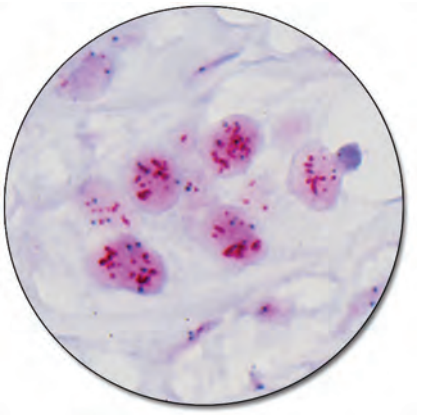
*HER2* CISH pharmDx Kit is indicated as an aid in the assessment of patients for whom Herceptin treatment is being considered. Results from the *HER2* CISH pharmDx are intended for use as an adjunct to the information currently used for estimating prognosis in stage II, node-positive breast cancer patients.

*HER2* CISH pharmDx Kit is a complete system providing all reagents required to perform 20 CISH assays. This includes pre-treatment reagents, *HER2* and reference chromosome 17 probe mix, peroxidase mix, CISH antibody mix, red and blue chromogens, substrate buffers and mounting media. A standard validated procedure and validated interpretation manual are also provided.

*HER2* CISH pharmDx Kit, Code SK109, is FDA approved.



*Breast carcinoma (FFPE) with non-amplified HER2 gene status stained with HER2 CISH pharmDx Kit, Code SK109.*



*Breast carcinoma (FFPE) with amplified HER2 gene status stained with HER2 CISH pharmDx Kit, Code SK109.*

## Features

### Chromogenic dual color visualization

- Allows fast and convenient method for scoring
- Improves scoring ratios accuracy due to counting both *HER2* gene signals and centromere signals in the same cells on one slide
- Distinguishes true gene amplifications or deletions from chromosomal aneuploidy

### Preservation of morphology

- Enables easy and fast identification of invasive tissue and internal control

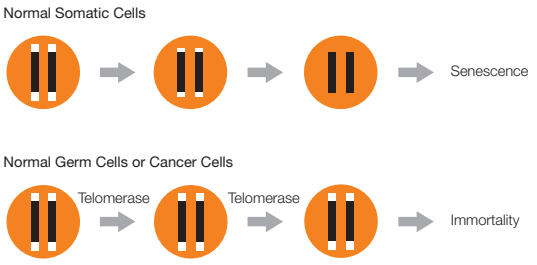
### Interpretation by bright field microscopy

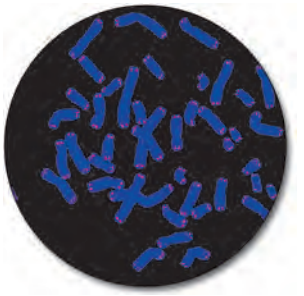
- Saves the expense and the required use of a fluorescence microscope
- Stained sections can be stored at room temperature without loss of signals
- Provides the opportunity to archive and re-evaluate at any time

# Telomere PNA FISH Kits

Telomeres are the physical ends of eukaryotic chromosomes that in vertebrates consist of multiple copies of the sequence TTAGGG. The protective telomeres keep the chromosome ends intact, and thereby protect the underlying genes. In normal somatic cells, the telomere length shortens at each cell division, finally leading to senescence. Some cells maintain their capacity to divide due to the action of the enzyme, telomerase. Examples are germ cells, fetal cells, hematopoietic stem cells, and basal cells of the epidermis. Established tumor cell lines can divide forever and are "immortal" mainly due to reactivation of telomerase. In 80-90% of human primary tumors telomerase is reactivated. Telomerase activity and the preservation of telomere length are, therefore, important for the cancerous process. The genetically determined variation in telomerase activity between individuals makes telomere length measurements relevant for the study of age-related diseases. The telomeres of the individual chromosome arms show heterogeneity in the number of telomeric repeats.

The Telomere PNA FISH Kits are for the detection of human (or other vertebrate) telomere sequences by fluorescence in situ hybridization (FISH) using a fluorochrome-conjugated PNA probe. PNA is superior to DNA in terms of sensitivity and specificity as a coverage of 99-100% can be achieved. The probe does not recognize subtelomeric sequences allowing exact measurement of the telomere length.



*Metaphase spread of human lymphocyte stained with Telomere PNA FISH Kit/Cy3, Code K5326.*

**Telomere PNA FISH Kits**

| | | | |
|---|---|---|---|
| RUO | K5326 | Telomere PNA FISH Kit/Cy3 | 20 tests |
| RUO | K5325 | Telomere PNA FISH Kit/FITC | 20 tests |

The Telomere PNA FISH Kits provide a convenient, rapid method for detection of the telomeric sequences in metaphase spreads and interphase nuclei in samples from all vertebrate cells. In addition to the fluorochrome-conjugated peptide nucleic acid (PNA) probe, the kits contain pre-treatment solution, rinse solution, wash solution and Tris-buffered saline.

Polyclonal Rabbit Anti-

**Fluorescein Isothiocyanate (FITC)**

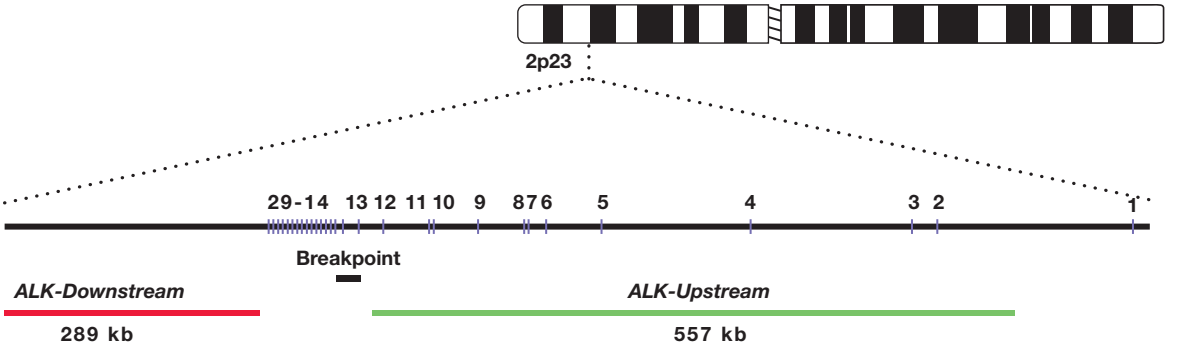
| | | | |
|---|---|---|---|
| RUO | P5100 | HRP. Affinity-isolated F(ab') | 0.5 mL |

This enzyme-conjugated antibody reacts strongly with free fluorescein and with fluoresceinyl groups. It is very well-suited for the sensitive visualization of targets, such as DNA or RNA that have been hybridized to FITC-labeled nucleic acid or PNA probes.

### *ALK* DNA Probe, Fluorochrome-Conjugated

ASR Y5417 0.2 mL

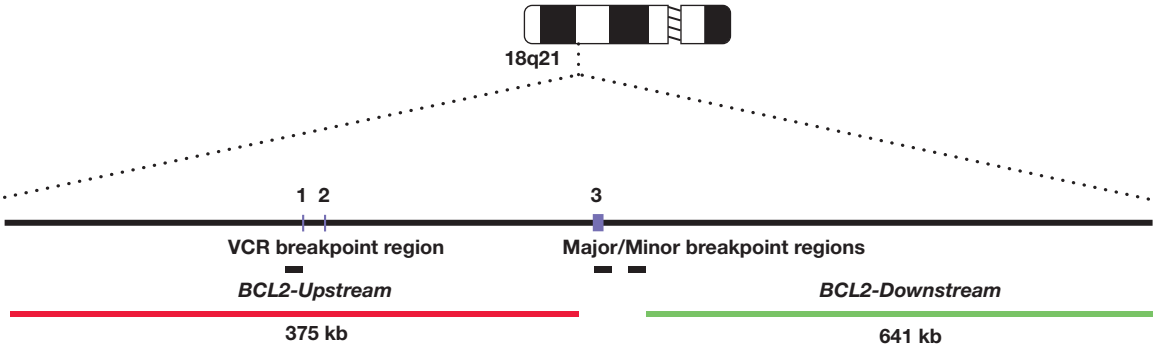
The human *ALK* gene consists of 29 exons spanning a region of ~728 kb on chromosome 2 band p23. Y5417 is a probe based on a combination of DNA and PNA technology, and contains a two-part fluorochrome-conjugated DNA probe and unlabeled PNA blocking probes. The fluorochrome-conjugated DNA probe is a Texas Red-labeled DNA probe *(ALK-Downstream)* covering 289 kb telomeric to the *ALK* breakpoint cluster region and a fluorescein-labeled DNA probe *(ALK-Upstream)* covering 557 kb centromeric to the *ALK* breakpoint cluster region.




### *BCL2* DNA Probe, Fluorochrome-Conjugated

ASR Y5407 0.2 mL

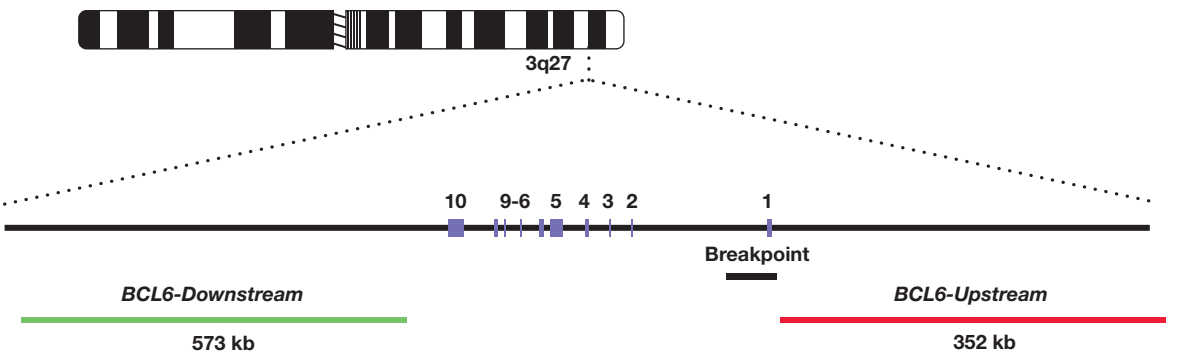
The human *BCL2* gene consists of 3 exons spanning a region of ~195 kb on chromosome 18 band q21. Y5407 is a probe based on a combination of DNA and PNA technology, and contains a two-part fluorochrome-conjugated DNA probe and unlabeled PNA blocking probes. The fluorochrome-conjugated DNA probe is a Texas Red-labeled DNA probe *(BCL2-Upstream)* covering 375 kb telomeric to the *BCL2* major/minor breakpoint cluster regions and a fluorescein-labeled DNA probe *(BCL2-Downstream)* covering 641 kb centromeric to the *BCL2* major/minor breakpoint cluster regions.




### *BCL6* DNA Probe, Fluorochrome-Conjugated

ASR Y5408 0.2 mL

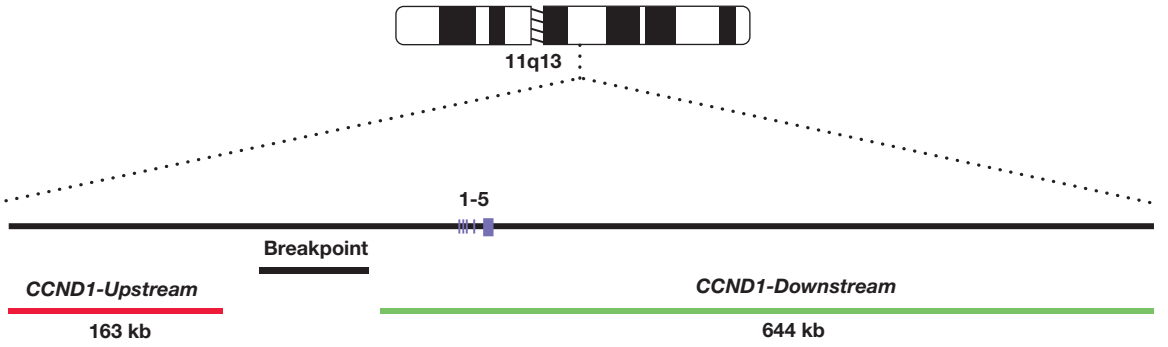
The human *BCL6* gene consists of 10 exons spanning a region of ~24 kb on chromosome 3 band q27. Y5408 is a probe based on a combination of DNA and PNA technology, and contains a two-part fluorochrome-conjugated DNA probe and unlabeled PNA blocking probes. The fluorochrome-conjugated DNA probe is a Texas Red-labeled DNA probe *(BCL6-Upstream)* covering 352 kb telomeric to the *BCL6* breakpoint cluster region, and a fluorescein-labeled DNA probe *(BCL6-Downstream)* covering 573 kb centromeric to the *BCL6* breakpoint cluster region.



### *CCND1* DNA Probe, Fluorochrome-Conjugated

ASR Y5414 0.2 mL

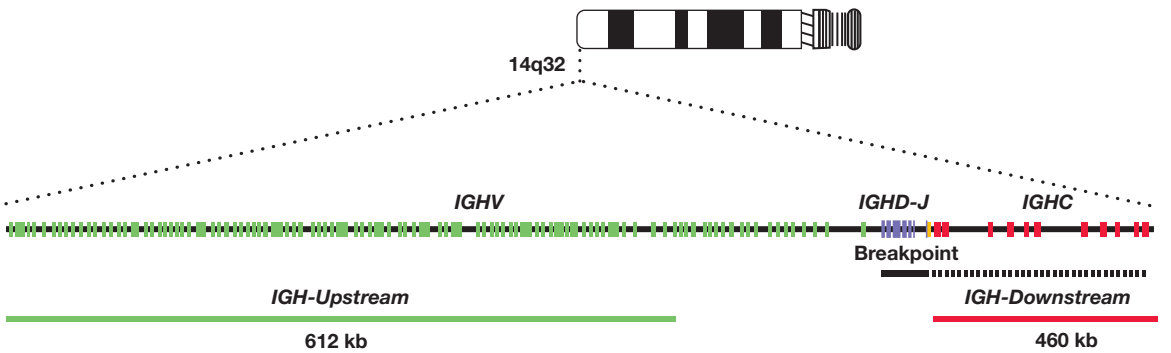
The human *CCND1* gene consists of 5 exons spanning a region of ~13 kb on chromosome 11 band q13. Y5414 is a probe based on a combination of DNA and PNA technology, and contains a two-part fluorochrome-conjugated DNA probe and unlabeled PNA blocking probes. The fluorochrome-conjugated DNA probe is a Texas Red-labeled DNA probe *(CCND1-Upstream)* covering 163 kb centromeric to the *CCND1* breakpoint cluster region and a fluorescein-labeled DNA probe *(CCND1-Downstream)* covering 644 kb telomeric to the *CCND1* breakpoint cluster region.




### *IGH* DNA Probe, Fluorochrome-Conjugated

ASR Y5406 0.2 mL

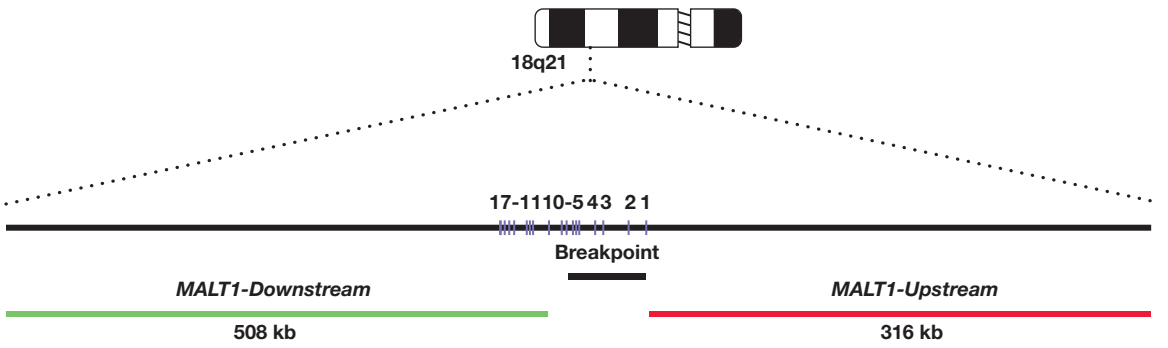
The *IGH* locus at chromosome 14 consists of 170-176 genes. These genes are divided into 123-129 variable *(IGHV)* genes, 27 diversity *(IGHD)* gene segments, 9 joining *(IGHJ)* gene segments, and 11 constant *(IGHC)* genes. The *IGH* locus spans a region of 1.25 Mb on chromosome 14 band q32. Y5406 is a probe based on a combination of DNA and PNA technology, and contains a two-part fluorochrome-conjugated DNA probe and unlabeled PNA blocking probes. The fluorochrome-conjugated DNA probe is a Texas Red-labeled DNA probe *(IGH-Downstream)* covering 460 kb centromeric to the *IGH* breakpoint cluster region and a fluorescein-labeled DNA probe *(IGH-Upstream)* covering 612 kb telomeric to the *IGH* breakpoint cluster region.




### *MALT1* DNA Probe, Fluorochrome-Conjugated

ASR Y5409 0.2 mL

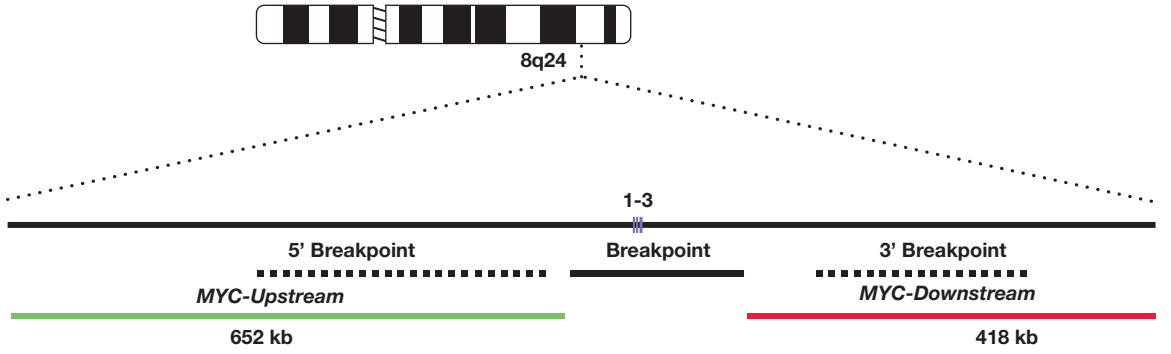
The human *MALT1* gene consists of 17 exons spanning a region of ~80 kb on chromosome 18 band q21. Y5409 is a probe based on a combination of DNA and PNA technology, and contains a two-part fluorochrome-conjugated DNA probe and unlabeled PNA blocking probes. The fluorochrome-conjugated DNA probe is a Texas Red-labeled DNA probe *(MALT1-Upstream)* covering 316 kb centromeric to the *MALT1* breakpoint cluster region and a fluorescein-labeled DNA probe *(MALT1-Downstream)* covering 508 kb telomeric to the *MALT1* breakpoint cluster region.



### *MYC* DNA Probe, Fluorochrome-Conjugated

ASR Y5410 0.2 mL

The human *MYC* gene consists of 3 exons spanning a region of ~5 kb on chromosome 8 band q24. Y5410 is a probe based on a combination of DNA and PNA technology, and contains a two-part fluorochrome-conjugated DNA probe and unlabeled PNA blocking probes. The fluorochrome-conjugated DNA probe is a Texas Red-labeled DNA probe *(MYC-Downstream)* covering 418 kb telomeric to the *MYC* breakpoint cluster region and a fluorescein-labeled DNA probe *(MYC-Upstream)* covering 652 kb centromeric to the *MYC* breakpoint cluster region.



# SureFISH ALK/RET/ROS1 Probes

## Oligonucleotide-Based FISH Probes

The unique SureFISH* DNA FISH probes are designed in silico and chemically synthesized using the company's high-fidelity, oligonucleotide library synthesis (OLS) technology. This eliminates the limitations of FISH probes manufactured with bacterial artificial chromosome (BAC) technology.

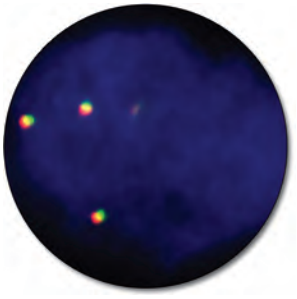
SureFISH

**ALK BA**

| | | | | |
|---|---|---|---|---|
| ASR | G111200 | P5, SureFISH | **NEW** | 5 µL |
| ASR | G111400 | P20, SureFISH | **NEW** | 20 µL |
| ASR | G211400 | P20 x 6, SureFISH | **NEW** | 20 µL, 6 vials |
| ASR | G111900 | P200 | **NEW** | 200 µL |

**Child Probe 5' GR, Chr2**
Start 29446949, Stop 30045655

**Child Probe 3' RD, Chr2**
Start 29146786, Stop 29446528



*ALK probe on FFPE tissue. Each probe is sequence verified and tested by FISH to ensure detection of and specificity for the stated genomic coordinates.*

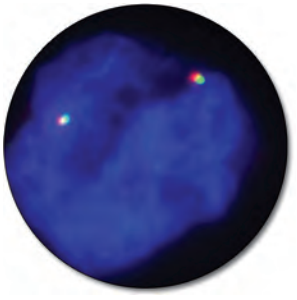
SureFISH

**RET BA**

| | | | | |
|---|---|---|---|---|
| ASR | G111202 | P5, SureFISH | **NEW** | 5 µL |
| ASR | G111402 | P20 x 6, SureFISH | **NEW** | 20 µL |
| ASR | G211402 | P20 x 6, SureFISH | **NEW** | 20 µL, 6 vials |
| ASR | G111902 | P200 | **NEW** | 200 µL |

**Child Probe 5' GR, Chr10**
Start 43609847, Stop 44211442

**Child Probe 3' RD, Chr10**
Start 43465309, Stop 43609540



*RET probe on FFPE tissue. Each probe is sequence verified and tested by FISH to ensure detection of and specificity for the stated genomic coordinates.*

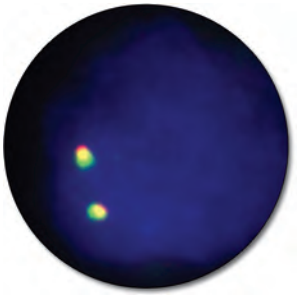
SureFISH

**ROS1 BA**

| | | | | |
|---|---|---|---|---|
| ASR | G111201 | P5, SureFISH | **NEW** | 5 µL |
| ASR | G111401 | P20, SureFISH | **NEW** | 20 µL |
| ASR | G211401 | P20 x 6, SureFISH | **NEW** | 20 µL, 6 vials |
| ASR | G111901 | P200, SureFISH | **NEW** | 200 µL |

**Child Probe 5' GR, Chr6**
Start 117747013, Stop 118899513

**Child Probe 3' RD, Chr6**
Start 117320499, Stop 117609677



*ROS1 probe on FFPE tissue. Each probe is sequence-verified and tested by FISH to ensure detection of and specificity for the stated genomic coordinates.*

* SureFISH probes are manufactured by Agilent Technologies, Inc.

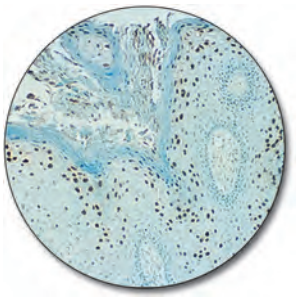
## GenPoint Amplified Signal Detection System

Dako GenPoint system is a powerful, non-radioactive in situ hybridization signal amplification system for biotinylated probes. Based on a patented catalyzed signal amplification (CSA) methodology, it offers in situ PCR sensitivity with none of the associated complexities of costly instrumentation or contamination concerns. Dako GenPoint system can be used with routinely processed tissue or cell preparations making it an extremely versatile tool for in situ hybridization. Its signal amplification allows the user to visualize gene targets which are normally not detectable by traditional in situ hybridization procedures; for instance, the Dako GenPoint system positively labels single copies of HPV16 in SiHa cells. CSA is based on the catalyzed deposition of biotinyl tyramide. When followed by HRP-conjugated streptavidin, a high amplification of the signal occurs at the hybridization site.

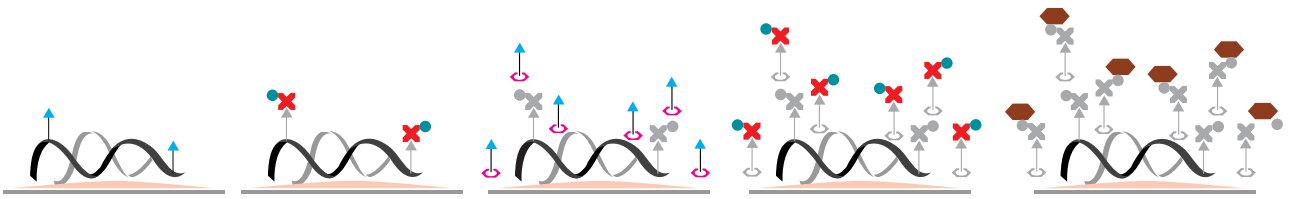
**Further Information**

The method is based on the consecutive application of:

1. Biotinylated probe
2. Peroxidase-conjugated streptavidin
3. Biotinyl tyramide
4. Peroxidase-conjugated streptavidin
5. Chromogenic substrate (diaminobenzidine (DAB))



*Human condyloma stained with a HPV Type 11, DNA probe.*




**GenPoint, Catalyzed Signal Amplification System***

IVD K0620 For in situ hybridization 65 tests

The GenPoint™ system locates target sites hybridized with biotinylated nucleic acid probes with high sensitivity and resolution. The kit includes stringent wash concentrate, peroxidase-conjugated streptavidin, biotinyl tyramide, and diaminobenzidine (DAB) chromogenic substrate.

* Dako GenPoint embodies technology developed by and licensed from NEN Life Science Products, Inc. (U.S. Patent 5,196,306).
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This product is distributed and sold to the End-User pursuant to a license from NEN Life Science Products, Inc. for use by the End-User in manual or automated processing on Dako instrumentation only of glass microscope slides or other support material (other than microarrays and bio-chips) containing cell or tissue specimens for examining those specimens under a microscope (including automated image capture and analysis systems) for the purpose of detecting target nucleic acids or proteins. Purchase does not include or carry any right to resell or transfer this product either as a stand alone product or as a component of another product. Any use of this product other than the licensed use without the express written authorization of NEN Life Science Products, Inc. is strictly prohibited.

## Standard Nucleic Acid Detection System

In Situ Hybridization Detection System, Code K0601, provides a rapid, simple, ready-to-use detection of biotinylated DNA or RNA probes.

STEP 1 Hybridization of biotinylated probe to target nucleic acid.

STEP 2 Application of alkaline phosphatase-conjugated streptavidin.

**In Situ Hybridization Detection System**

IVD K0601 For biotinylated nucleic acid probes 50 tests

Components are: Stringent wash concentrate, ready-to-use alkaline phosphatase-conjugated streptavidin, ready-to-use BCIP/NBT chromogen solution and detailed instructions. Results may be obtained within two hours. The number of tests is based on the use of 150 µL of reagent per slide.

## PNA Probes and Detection System

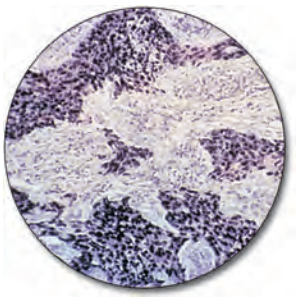
Hybridization techniques are used to localize and identify specific nucleic acid sequences. Initially used as a research tool, the development of non-radioactive probe labeling and detection systems has made this technology available to a wide variety of routine applications. Traditionally either cloned probes or synthesized oligonucleotide probes have been used for hybridization. We have successfully introduced the peptide nucleic acid (PNA) probe, a nucleotide analogue capable of binding to DNA/RNA in a sequence-specific manner obeying the Watson-Crick base pairing rules.

In PNA, the sugar phosphate backbone of DNA/RNA has been replaced by a synthetic peptide backbone keeping the distances between bases exactly the same as in DNA/RNA. The increase in affinity is evident from the increase in the $T_m$ of 1-1.5 °C per base pair. Further, the PNAs are very stable molecules. Experiments have shown virtually no degradation by DNases, RNases, proteinases or peptidases. The PNA probes are labeled with fluorescein and detected using the sensitive PNA ISH Detection Kit, Code K5201.

**Epstein-Barr Virus (EBER) PNA Probe/Fluorescein**

RUO Y5200 40 tests, 1 mL

Epstein-Barr Virus (EBER) PNA Probe/Fluorescein detects the 2 nuclear RNA transcripts EBER1 and EBER2 encoded by Epstein-Barr virus. The product contains a mixture of 4 fluorescein-labeled PNA probes complementary to parts of the 2 nuclear EBER RNAs.



*Nasopharyngeal carcinoma stained with EBV (EBER) PNA Probe/FITC, Code Y5200, and PNA ISH Detection Kit, Code K5201.*

**PNA ISH Detection Kit**

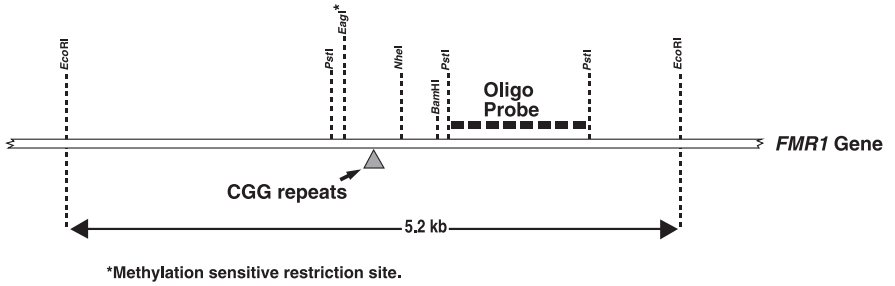
IVD K5201 40 tests

PNA ISH Detection Kit for fluorescein-labeled peptide nucleic acid (PNA) probes contains all reagents necessary for performing an in situ hybridization, except for the specific probe. The kit contains proteinase K, negative and positive control probes, stringent wash solution, alkaline phosphatase-conjugated F(ab') fragment of rabbit anti-FITC, chromogenic substrate combined with an inhibitor of endogenous alkaline phosphatase (BCIP/NBT/levamisole), and Tris-buffered saline. A detailed working procedure is included. The number of tests is based on the use of 150 µL of reagent per slide.

# Fragile X Probe

**Fragile X Probe, Fluorescein-Labeled**

ASR Y1442 5 blots x 150 cm$^2$




*Methylation sensitive restriction site.

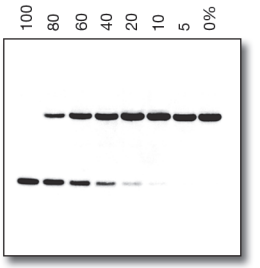
## Blotting Detection System

**Chemiluminescent System for Nucleic Acid Blotting**

Chemiluminescent System for Nucleic Acid Blotting is a complete kit for the detection of Southern or Northern blot hybridizations using fluorescein-labeled probes. Hybridized probes are detected by incubation with an alkaline phosphatase-conjugated antibody fragment directed against fluorescein. The immobilized alkaline phosphatase activity is used to hydrolyze a chemiluminescent dioxetane-phosphate substrate, resulting in sustained light emission at the site of the hybridized probe. The light emitted from the blot is captured by overlaying the blot with photographic film, or by imaging using a sensitive CCD camera system.

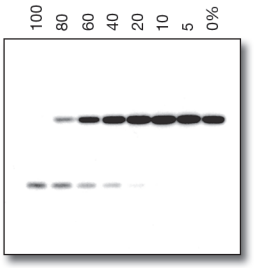
Special features of the Dako Chemiluminescent System:

- Non-radioactive reagents (health and disposal issues eliminated)
- Exposure time reduced to minutes as opposed to days using the $^{32}$P-method
- Complete with all necessary detection reagents in either liquid concentrates or pre-measured powder packets for convenience
- Uses standard film and processing equipment




*Fluorescein-labeled IGHJ6 probe and chemiluminescence. Percentages represent the fraction of tumor cell DNA mixed with normal mononuclear cell DNA.*

**Exposure time:** *minutes*




*$^{32}$P-labeled IGHJ6 probe and autoradiography. Percentages represent the fraction of tumor cell DNA mixed with normal mononuclear cell DNA.*

**Exposure time:** *days*

## Detection System

**Chemiluminescent System for Nucleic Acid Blotting**

K0626 20 blots x 150 cm$^2$

Included in the kit are: Blocking solution, wash buffer, alkaline phosphatase-conjugated anti-FITC, chemiluminescent substrate, and detailed instructions.

## Ancillaries

**Hybridization Buffer**

S1801 250 mL

**SSC Stringent Wash for Oligo (short) Probes**

S1803 5 pk

## Dako Omnis

**Fluorescence Mounting Medium (Dako Omnis)**

IVD GM304 Ready-to-use 20 tests, 0.8 mL

Fluorescence Mounting Medium (Dako Omnis) is intended for mounting of formalin-fixed, paraffin-embedded (FFPE) tissue sections after FISH staining performed onboard the Dako Omnis instrument. The mounting medium also contains 500 µg/L DAPI for improved nuclei staining.

**ISH Cleaning Solution (Dako Omnis)**

IVD GC207 Ready-to-use 100 tests, 10 mL

ISH Cleaning Solution (Dako Omnis) is an accessory to the Dako Omnis instrument. It is used for cleaning the pipette tip between dispenses of in situ hybridization probes. Washing with ISH Cleaning Solution dissolves ISH probe, allowing remaining probe to be effectively washed away with water. The product is provided in a ready-to-use vial for the Dako Omnis instrument.

**ISH Ethanol Solution, 96% (Dako Omnis)**

IVD GM300 Ready-to-use 20 tests, 14 mL

ISH Ethanol Solution, 96% (Dako Omnis) is intended for use in automated in situ hybridization assays together with the Dako Omnis instrument on formalin-fixed, paraffin-embedded (FFPE) tissue sections. The solution is used in the wash step after target retrieval. The product is provided in a ready-to-use vial for the Dako Omnis instrument.

**ISH Lid, for Dako Omnis**

GC102 5 lids

Dako Omnis ISH Lid is intended for use in FISH procedures. Each Dako Omnis ISH Lid holds five slides and has five built-in Cover Glasses and one Humidity Pad. The Cover Glasses serve to distribute probe buffer across the staining area and to reduce buffer evaporation. The Humidity Pad with deionized water added serves to increase the humidity inside Dako Omnis ISH Lid to further reduce evaporation. Dako Omnis ISH Lid also provides insulation to maintain proper denaturation temperature.
Dako Omnis ISH Lid is single use only and is classified as non-hazardous waste.

**ISH Pepsin (Dako Omnis)**

IVD GM302 Ready-to-use 20 tests, 7 mL

ISH Pepsin (Dako Omnis) is intended for use in automated in situ hybridization assays together with the Dako Omnis instrument on formalin-fixed, paraffin-embedded (FFPE) tissue sections. The solution is used in the digestion step. The product is provided in a ready-to-use vial for the Dako Omnis instrument.

**ISH Pre-Treatment Solution (20x) (Dako Omnis)**

IVD GM301 Concentrate 175 mL, 20x concentrated

ISH Pre-Treatment Solution (20x) (Dako Omnis) is intended for use in automated in situ hybridization assays together with the Dako Omnis instrument on formalin-fixed, paraffin-embedded (FFPE) tissue sections. The solution is used in the pre-treatment step. An inert green color is added to the buffer for easy identification and user friendliness. The volume is tailored for dilution in one Dako Omnis bulk bottle.

**ISH Stringent Wash Buffer (20x) (Dako Omnis)**

IVD GM303 Concentrate 175 mL, 20x concentrated

ISH Stringent Wash Buffer (20x) (Dako Omnis) is intended for use in automated in situ hybridization assays together with the Dako Omnis instrument on formalin-fixed, paraffin-embedded (FFPE) tissue sections. The solution is used in the post-hybridization step. An inert yellow color is added to the buffer for easy identification and user friendliness. The volume is tailored for dilution in one Dako Omnis bulk bottle.

**Mixing Device, for Dako Omnis**

GC116 1 unit

Dako Omnis Mixing Device is an accessory to the Dako Omnis instrument. It is designed specifically to support the fluorescence in situ hybridization (FISH) and the chromogenic in situ hybridization (CISH) procedures. The Dako IQISH buffer is extremely viscous, and during storage the reagent phase separates. Hence the Dako IQISH reagents require a particular preparatory processing to thaw and unify the content.
Some Dako ISH reagents are therefore provided in dedicated ISH reagent vials containing a mixing ball, and the Dako Omnis Mixing Device is designed to fit together with these ISH reagent vials.
Dako Omnis Mixing Device contains a magnet that enables the mixing ball to move up and down (110 cycles) inside the vial after 40 minutes thawing of the ISH reagent; thus ensuring a homogenous probe mix prior to application on the Dako Omnis instrument.

**Vial with Mixing Ball, 2 mL, for Dako Omnis**

GC206 25 vials 2 mL

Dako Omnis Vial with Mixing Ball, 2 mL has been designed as an accessory for Dako Omnis and Dako Omnis Mixing Device and is intended for use in ISH procedures using user-provided FISH probes diluted in ethylene carbonate-based hybridization buffer (IQFISH). Dako Omnis Vial with Mixing Ball, 2 mL includes a mixing ball that is used by Dako Omnis Mixing Device to mix the IQFISH hybridization buffer with the user-provided probe. Each package contains 25 vials, 25 caps and 25 mixing balls.

## Manual Kits

### Cytology FISH Accessory Kit

IVD K5499 20 tests

Cytology FISH Accessory Kit is designed for optimal performance with Dako FISH DNA probes on cytological specimens. Instructions for the simple FISH procedure are provided with the kit. The Cytology FISH Accessory Kit contains all key reagents, except for the probe, necessary to perform 20 FISH assays, i.e. stringent wash buffer, wash buffer, antifade mounting medium with fluorescent nuclei counterstain, and coverslip sealant. No protease treatment is required. The procedure may be performed manually or using the Dako Hybridizer, Codes S2450/S2451.


### Histology FISH Accessory Kit

IVD K5799 20 tests

Histology FISH Accessory Kit is designed for optimal performance with Dako FISH probes on formalin-fixed, paraffin-embedded tissue sections. Instructions for the simple FISH procedure are provided with the kit. The Histology FISH Accessory Kit contains all key reagents, except for the probe, necessary to perform 20 FISH assays in up to 10 independent staining runs, i.e. pre-treatment solution, pepsin (ready-to-use), stringent wash buffer, wash buffer, antifade mounting medium with fluorescent nuclei counterstain, and coverslip sealant. The procedure may be performed manually or using Dako Hybridizer, Codes S2450/S2451.


## Manual Reagents

### IQFISH Fast Hybridization Buffer*

| | | | |
|---|---|---|---|
| G9415A | Hybridization Buffer 200 | **NEW** | 200 µL |
| G9416A | Hybridization Buffer 200 x 6 | **NEW** | 200 µL x 6 |
| G9414A | Hybridization Buffer 900 | **NEW** | 900 µL |

* Manufactured by Agilent Technologies, Inc.

# H&E Solution

# Introduction to the H&E Solution

### Dako CoverStainer for H&E

Our state-of-the-art H&E solution fully automates every step of the hematoxylin and eosin staining process from baking to drying. Providing the operational flexibility to meet laboratories' special needs, it delivers consistent, high-quality results while maximizing productivity and optimizing resource utilization.

Dako H&E solution combines the advanced Dako CoverStainer with Dako ready-to-use reagents, a Dako validated, optimized protocol, and features Dako Reagent Management System (DakoRMS) - an intelligent, automated reagent handling system that ensures consistent, high-quality staining.

### Excellent Quality

Excellent quality staining is ensured when combining Dako CoverStainer's comprehensive capabilities with our high-quality, ready-to-use reagents.

### Great Consistency

Dako CoverStainer consistently stains up to 3,000 slides with the same reagents to achieve accurate results. DakoRMS features reagent circulation which minimizes precipitation while specially designed racks reduce carry-over.

### High Productivity

Dako CoverStainer automates the H&E process completely from microtome to microscope with one of the fastest fully automated H&E solutions on the market. Dako CoverStainer offers a turn-around time of as little as 46 minutes and the ability to process up to 240 slides per hour. The productivity is increased with the ability to do overnight runs.

### Optimized Workflow

Dako CoverStainer is designed with lean processes in mind. It is simple to operate and requires minimal user intervention, reducing hands-on time and freeing up staff to complete other tasks. With continuous batch loading and unloading, Dako CoverStainer will even out your workload, optimizing your routine staining process.

### Outstanding Flexibility

Optimize your flexibility and control over the end result when using Dako CoverStainer to fully automate your process. The laboratory's individual needs are realized with the ability to customize staining protocols. Get the individualized results that pathologists desire by running multiple protocols simultaneously.

### DakoLink Software

Dako CoverStainer is integrated in the DakoLink software. This one-way connection from Dako CoverStainer to DakoLink enables you to benefit from the quality system offered, including features such as easy report generation, labeling system and slide tracking.


**Make use of the advantages that DakoLink software offers!**

# Dako CoverStainer

Dako CoverStainer is a fully automated H&E working station that covers: Baking → Dewaxing → Staining → Dehydration → Coverslipping → Drying. Featuring fully automated and flexible operation, Dako CoverStainer provides the H&E solution laboratories can count on for accurate results, streamlined workflow, and enhanced productivity.

- Full automation reduces errors, manual handling and turnaround time
- System mobility utilizes laboratory space more efficiently
- Continuous loading and unloading of slides improves throughput
- Integrated baking and heating capacity adds convenience and efficiency
- Wide range of customizable protocols provides maximum system flexibility
- Elimination of separate workstations creates seamless staining to coverslipping
- Intuitive software facilitates rapid start-up and operation

**Dako CoverStainer**

| | | |
|---|---|---|
| IVD | CS100 H&E instrument | 1 unit |

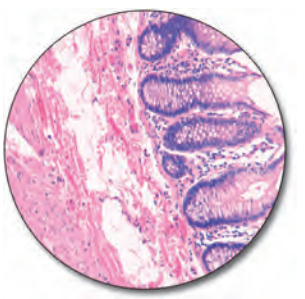
Dako CoverStainer automates every step of the H&E process from baking, dewaxing and staining through to the dehydrated, coverslipped and dried slide that is ready for examination by the pathologist. Dako Reagent Management System (DakoRMS), which is an integral part of Dako CoverStainer, automates the reagent handling process, and secures consistent high staining quality as well as better safety for laboratory personnel when handling reagents.
Dako CoverStainer is part of the Dako H&E solution which also consists of ready-to-use reagents, an optimized, validated H&E protocol consumables as well as DakoLink software Integration. This combination gives laboratories consistently high staining quality while at the same time reducing hands-on and turnaround time.

**Hardware Specifications**

| | |
|---|---|
| Dimensions | 65.1" W x 26.5" D x 50.1" H (165.5 cm W x 67.2 cm D x 128.0 cm H) |
| Electrical specifications | 100-120 V: ~6 A, 50/60 Hz |
| | 220-240 V: ~3 A, 50/60 Hz |
| Normal operating temperature | 18-26 °C (64-79 °F), relative humidity: 25-60% |
| Network/LIS connection | LAN: preferably with DHCP server |
| Cable | Minimum CAT-5 patch cable, maximum length: 3 m (10 ft) |
| Total slide capacity | 120 slides per run/240 slides per hour, continuous loading |
| Reagent capacity | 36 reagent stations, 18 dip tanks with 2 compartments |

*H&E, Colon - Slide No. 1*

*These H&E slides illustrate the staining quality and consistency of Dako CoverStainer. This slide is the first stained with fresh Dako H&E reagents.*



*H&E, Colon - Slide No. 3000*

*This slide is the 3000th slide stained with the very same reagents. It demonstrates quality and consistency for up to 3000 slides (or 5 days usage) with the same H&E reagents.*

# Coverslipper for Glass Slides

The compact Dako Coverslipper is a conveniently small and fast instrument which provides the right combination of efficiency and design simplicity to help improve laboratory productivity. For both small and large laboratories requiring high reliability and consistency in slide output, the easy-to-use Dako Coverslipper is an excellent solution.

- High throughput by combining efficiency and design simplicity
- High efficiency via automated versatility and accelerated slide processing
- High performance with consistent uptime through trusted Dako reliability

**Coverslipper, Dako**

| | | |
|---|---|---|
| CR100 | Coverslipper | 1 unit, 120/240 volts |

Coverslipper automates and simplifies the tedious task of adding cover glass/coverslips on microscope slides. The instrument can handle up to 600 slides per hour making it one of the fastest on the market. Quality is not offset by the speed of the instrument and the unit consistently provides high quality coverslipping. The flexibility of Coverslipper allows it to handle various cover glass/coverslip sizes. In addition to the flexibility of Coverslipper it is easy and straightforward to operate and cleaning and maintenance is simple to do. It is small enough to fit into fume cabinets, easy to move around and accepts a variety of commercial mounting media.

# Ancillaries and Accessories

**Ancillaries**
We offer high-quality cover glasses in different sizes. They range from 24 mm x 40-60 mm.

**Accessories**
Dako H&E Accessories are ready-to-use reagents that provide excellent staining quality and reproducibility using Dako CoverStainer. All reagents are fully compatible with Dako CoverStainer and can be inserted directly in the instrument thereby minimizing hands-on time. Mounting Medium and Cover Glass reduce the risk of air bubbles thereby providing crisp and clear Hematoxylin & Eosin stained tissue sections.

**Dako CoverStainer Slide Rack**
The slide rack for DakoCoverStainer has a unique design which minimizes reagent carryover, extending reagent longevity and enabling consistent staining results.

At the same time, the Dako CoverStainer slide rack gives you full visibility of your slides which will help you reduce the time spent sorting them.

**Bluing Buffer, Dako**

IVD CS702 Ready-to-use Up to 3000 tests, 1 L

Dako Bluing Buffer ensures the proper alkalinity in primary staining resulting in a detailed, crisp and clear nuclear staining. Dako Bluing Buffer is ready-to-use and suitable for use with Dako CoverStainer.

**Cover Glass, Dako**

IVD CS704 24 x 50 mm 5 x 200 pcs

Dako Cover Glass can be used both for automated and manual coverslipping. These high-quality cover glasses are manufactured with consistent and uniform thickness and size for reliable coverslipping results. Dako Cover Glass are suitable for use with Dako CoverStainer.

**Cover Glass**

CR124 24 mm x 40 mm 5 x 200 pcs
CR122 24 mm x 55 mm 5 x 200 pcs
CR121 24 mm x 60 mm 5 x 200 pcs

All sizes of Cover Glass are suitable for use with the compact Dako Coverslipper or manual coverslipping.

**Eosin, Dako**

IVD CS701 Ready-to-use Up to 3000 tests, 1 L

Dako Eosin is used for primary staining as a counterstain to Dako Hematoxylin. The reagent stains cytoplasm structures of certain cells (e.g.muscle), collagen and red blood cells in various shades of pink to orange. The result is a well-defined, stained slide. Dako Eosin is ready-to-use and suitable for use with Dako CoverStainer.

**Hematoxylin, Dako**

IVD CS700 Ready-to-use Up to 3000 tests, 1 L

Dako Hematoxylin is a histological staining reagent which is suitable for visualization of nuclei in tissue sections and cell preparations. The reagent does not contain alcohol and may be used for primary staining. The hematoxylin staining result is a well delineated crisp color in cell nuclei. Dako Hematoxylin is ready-to-use and suitable for use with Dako CoverStainer.

**Mounting Medium**

IVD CS703 Ready-to-use 473 mL

Dako Mounting Medium is a low viscosity, fast drying medium that is designed for use with an automated glass coverslipper. It is a permanent mounting medium and is compatible with xylene (aromatic) and xylene-free (aliphatic) clearing agents. Dako Mounting Medium is ready-to-use and suitable for use with Dako CoverStainer.

**Mounting Medium, Toluene-Free**

IVD CS705 Ready-to-use 500 mL

DakoToluene-Free Mounting Medium is a low viscosity, fast drying medium that is designed for use with an automated glass coverslipper. It is a permanent mounting medium and is compatible with xylene (aromatic) and xylene-free (aliphatic) clearing agents. Dako Toluene-Free Mounting Medium is ready-to-use and suitable for use with Dako CoverStainer.

**Slide Rack, Dako CoverStainer**

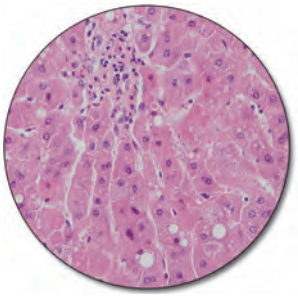
CS119 Slide racks, each holding 10 glass slides **NEW** 10 racks

Dako CoverStainer Slide Rack is designed for use on Dako CoverStainer. The slide rack holds the slides with samples to be processed on Dako CoverStainer. Each slide rack can carry up to ten slides and each slide is placed in positioning grooves and fixated by a spring. Dako CoverStainer is validated with slides having non-beveled edges (25-26 mm width x 76 mm length). Dako does not recommend the use of other slide types.

**Universal Label Printer (Link)**

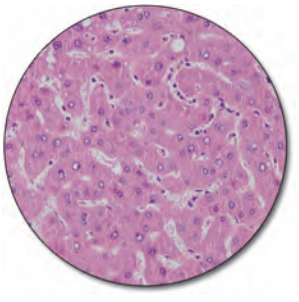
DL412 Label printer 1 unit

The printer works with all Dako instruments connected through DakoLink software, including Dako CoverStainer.



*H&E, Liver - Slide No. 1*

*These H&E slides illustrate the staining quality and consistency of Dako CoverStainer. This slide is the first stained with fresh Dako H&E reagents.*



*H&E, Liver - Slide No. 3000*

*This slide is the 3000th slide stained with the very same reagents. It demonstrates quality and consistency for up to 3000 slides (or 5 days usage) with the same H&E reagents.*

# Special Stains Solution

# Introduction to the Special Stains Solution

### Artisan Link Pro delivers excellent quality special stains using Artisan Reagents

Dako Special Stains Solution is a combination of the integrated Artisan Link Pro Special Staining System and high-quality special stains kits and accessories. The Artisan Link Pro unit consists of a slide processor, a touch screen computer system with DakoLink software and a report and slide label printer. Artisan Reagents are special stains kits and accessory reagents packaged in patented cartridges that provide precision dispensing of reagents for optimal staining quality.

### Simplify laboratory processes and improve productivity

Ready-to-use reagents and waste separation to four containers not only simplify laboratory processes but are also crucial factors to comply with newer and stricter safety and risk management requirements. Aimed to improve the productivity in your laboratory, the Artisan Link Pro Special Staining System also incorporates barcode reading technology for reagents and slides.

### Special Stains Solution connected to the whole pathology laboratory

Up to three Artisan Link Pro Special Staining Systems can be connected to one touch screen computer. It operates either in a single or in a networked configuration system using a LAN system (DakoLink software) or a Laboratory Information System (LIS). Each workstation has full access to a central database that contains all data and historical slide information for the entire installation. The software can manage and monitor all DakoLink-connected instruments on the network.

### Artisan Clearing Solution automates the process of slide drying and dewaxing

Artisan Clearing Solution allows for loading of slides directly from the microtome, thus automating the process of slide drying and dewaxing onboard the staining system for all protocols.

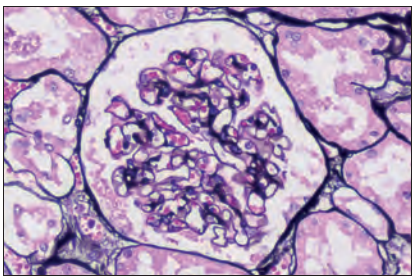
# Artisan Link Pro Special Staining System

This unit consists of a slide processor, a touch screen computer system with DakoLink software and a report and slide label printer. Up to three Artisan Link Pro Special Staining Systems can be connected to one touch screen computer. It operates either in single or in a networked configuration system using a LAN system (DakoLink software) or a Laboratory Information System (LIS); providing 24/7 access to the stainer processing status. Artisan Link Pro has a touch screen interface, which minimizes system footprint and simplifies operation.

It delivers excellent quality special stains using Artisan Reagents, which are packaged in patented cartridges that provide precision dispensing of reagents for optimal staining quality.

- **Artisan Link Pro Instrument**
  This unit consists of a slide processor, a touch screen computer system with DakoLink software and a report and slide label printer
- **Artisan Reagents**
  Artisan reagents include special stains and accessory reagents. Dako offers special stains kits specifically designed for Artisan Special Staining Systems. Artisan Clearing Solution is used for automated, onboard drying and dewaxing on Artisan Link and Artisan Link Pro.

| **Artisan Link Pro Special Staining System** | | | |
|---|---|---|---|
| IVD | AR310 | Slide-processing instrument | 1 unit |



*Artisan Link Pro Special Staining System delivers excellent quality stains in its broad menu.*

*Ready-to-use reagents and waste separation to four containers not only simplify the laboratory workflow but are also crucial factors to comply with newer and stricter safety and risk management requirements.*

*Aimed to improve the productivity and reduce the possibility of error in the laboratory, Artisan Link Pro incorporates automated 2D matrix reading technology to the slides and reagents.*

The Artisan Link Pro instrument uses the DakoLink software, which you can customize to meet your specific needs and requirements. Each workstation has full access to a central database that contains all data and historical slide information for the entire system. Each installation of DakoLink software can manage and monitor all staining instruments on the network.


A DakoLink server computer can do anything a workstation computer can do, except start a run. Laboratory Information System (LIS) located anywhere in the laboratory can be connected to Artisan Link Pro.

- 48-slide capacity with individual slide heating up to 65 °C gives optimal staining for both heat-sensitive and heat-tolerant special stains. This allows for shortened incubation times resulting in increased throughput.
- The reagent labels include a color strip which indicates the required storage conditions.
- Four separate waste bottles mean simple, neat and inexpensive waste removal for increased cost savings and risk management compliance. Four bottles separate organic solvents, acids and toxic chemicals from aqueous waste.
- Preview and print reports from the central database that contains all data and historical slide information. Reagent activities can be reported to track and manage your inventories.
- Artisan Clearing Solution allows for automating the slide drying and dewax process on-board the staining system.
- Touch screen interface minimizes footprint and simplifies operation.

# Artisan Link Pro Special Staining System (continued)

## Hardware Specifications

| Artisan Link Pro | |
|---|---|
| **Component** | **Description** |
| Dimensions | 32" W x 26" D x 20.5" H (80 cm W x 67 cm D x 52 cm H) |
| Weight | 150 lbs (68 kg) |
| Total slide capacity | 48 glass slides (25 mm and 26 mm) |
| Total reagent capacity | 50 reagent packs |
| Pack size | 50 tests pack: 200 dispense strokes<br>100 tests pack: 400 dispense strokes |
| Bulk fluid capacity | Six 1 L bottles (optional: 1 off-board 4 L bottle) |
| Reagent waste capacity | Two 2 L bottles, two 4 L bottles |
| Connections and cables | Two Ethernet cables for Artisan Link Pro connection network<br>AC line cord |
| Electrical requirements | 120/220-240 VAC<br>50/60 Hz<br>800 W |
| Power supply | T 6.30 A. 250 V Schurter FST0034.3125 time lag fuse |

| Artisan Link Pro Workstation | |
|---|---|
| **Component** | **Description** |
| Printer (reports) | Model HP DeskJet or equivalent |
| Printer (labels) | Universal Label Printer (Link) |
| Client/Server PC with operating system | All-in-one, medical grade touch screen computer (workstation), 2.2 GHz Intel® Core™ 2 or equivalent |
| Monitor and keyboard | 17" flat panel, touch screen |
| Pollution degree | 2 |
| Installation category | II |

## Installation Requirements

- An area of approximately 55" W x 36" D x 36" H (140 cm W x 90 cm D x 90 cm H) will be required for the instrument
- The specified area includes necessary room behind and on top of instrument for proper exhaust from the fans. To ensure adequate airflow behind the instrument, the space required for the DC input plug and the waste trap is sufficient.
- Dedicated power outlet preferred (or shared outlet with a provided surge protector)

# Artisan Accessories

**Alpha-Amylase, Artisan**

IVD AR171 50 tests/100 tests

**Clearing Solution, Artisan**

IVD AR309 Ready-to-use 5 x 100 tests

Artisan Clearing Solution is an environmentally safe, non-hazardous solution that allows deparaffinization and rehydration of tissue sections on Artisan Link and Artisan Link Pro Staining Systems. It removes paraffin from tissue sections as a pre-staining step and is compatible with all Artisan staining kits. Artisan Clearing Solution allows for automated, on-board drying, deparaffinization and rehydration of mounted tissue sections coming directly from the microtome.

**Maintenance Kit, Artisan**

AR314 Ready-to-use 33 tests

Artisan Maintenance Kit is used for maintenance of Artisan Link and Artisan Link Pro Staining Systems. This product is recommended for routine cleaning of the Artisan Link and Artisan Link Pro instruments, according to the recommended cleaning schedule. It has been optimally prepared and requires no mixing or diluting.

**Reagent Holder, 14 Pack, Artisan**

AR409 1 unit

**Slide Label Kit, Small Flap**

DL213 Slide label kit 1500 labels

**Universal Label Printer (Link)**

DL412 Label printer 1 unit

**Wash Solution, Artisan**

IVD AR102 Concentrated 4 x 200 mL, 50x concentrated

# Artisan Link and Link Pro Special Stains

We offer 30 Special Stains ranging from Acid-Fast Bacteria Stain Kit to Warthin-Starry Stain Kit. The onboard drying and deparaffinization feature, using the environmentally safe Artisan Clearing Solution, enables a total start to finish staining process on the Artisan Link and Artisan Link Pro Special Stains Staining System. The reagents are packaged in a patented reagent-sealed cartridge that provides fresh reagents to each slide. The precision dispensing of reagents results in optimal staining quality. The Artisan Link and Artisan Link Pro Special Stains Staining System includes the DakoLink software which has reagent and slide tracking using a 2D barcode system with the ability to connect up to three instruments to one workstation.

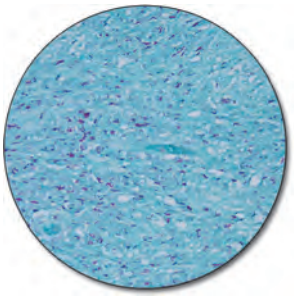
**The special stains kits in this section are for Artisan Link and Link Pro Special Staining Systems only. Not for use on Artisan Classic.**



### Acid-Fast Bacteria (AFB) Light Green Stain Kit, Artisan

IVD AR362 Ready-to-use 50 tests

Acid-Fast Bacillus (AFB) Light Green Stain Kit is intended to identify acid-fast bacteria, such as *Mycobacterium*, in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. Application of Carbol Fuchsin stains acid-fast bacteria red, followed by decolorization of all tissue elements except the acid-fast bacteria. A Light Green counterstain is then applied to impart a green color to all background tissue elements.

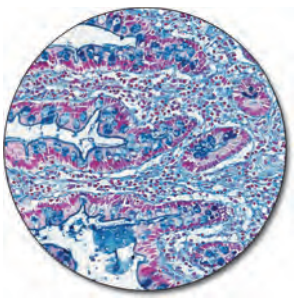


*Colon stained with AFB Light Green, Code AR362.*

### Colloidal Iron Stain Kit, Artisan

IVD AR307 Ready-to-use 50 tests

Colloidal Iron Stain Kit is intended to identify carboxylated and sulfated mucopolysaccharides and glycoprotein mucin in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. Colloidal ferric ions are, at a low pH, absorbed principally by carboxylated and sulfated mucosubstances staining a dark blue. A counterstain of Nuclear Fast Red stains the nuclei and cytoplasm light pink.



*Small intestine stained with Colloidal Iron, Code AR307.*

### Giemsa Stain Kit (Jenner-Wright), Artisan

IVD AR308 Ready-to-use 50 tests

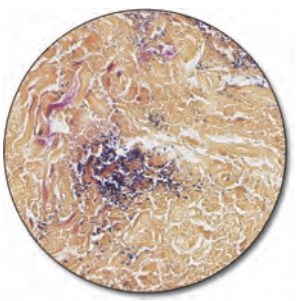
Jenner-Wright Giemsa Stain Kit is a stain technique used to permit differentiation of cells present in bone marrow tissue sections cut at 2-3 µm on the Artisan Link and Artisan Link Pro Staining Systems. Polychromatic stains are used as routine nuclear and cytoplasmic stains for bone marrow biopsy sections because of the color range of the cytoplasmic staining and the differentiation of hematopoietic cells achieved. Nuclei: blue, eosinophils: bright pink, leucocytes: shades of pink, gray, or blue depending on cell type and development. This stain is not recommended for bone marrow smears.

*Bone marrow stained with Jenner-Wright Giemsa, Code AR308.*

### Gram Yellow Stain Kit, Artisan

IVD AR306 Ready-to-use 50 tests

Gram Yellow Stain Kit is intended to identify Gram-positive and Gram-negative microorganisms in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. Gram Yellow Stain Kit is used to identify two distinct groups of microorganisms in tissue sections. Those that retain primary dye (Crystal Violet) are called Gram-positive. Those that lose the primary dye during decolorization are called Gram-negative. Mechanisms of Gram-positive organisms retaining the primary stain and Gram-negative organisms losing the primary stain are the result of the chemistry and structure of the organism's cell walls. Gram-positive organisms: dark blue, Gram-negative organisms: light pink to magenta and the background: yellow.

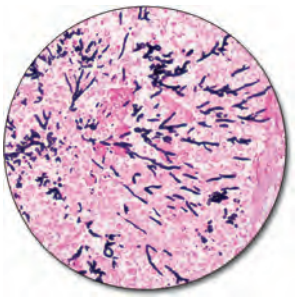


*Skin stained with Gram Yellow, Code AR306.*

### Grocott's Methenamine Silver (GMS) Eosin Stain Kit, Artisan

IVD AR376 Ready-to-use 50 tests

Grocott's Methenamine Silver (GMS) Eosin Stain Kit is intended to identify fungal organisms and *Pneumocystis jiroveci* (formerly known as *carinii*) in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. Fungi and *Pneumocystis jiroveci* are stained black while other tissue elements are stained pink. This stain is not recommended for cytology specimens.

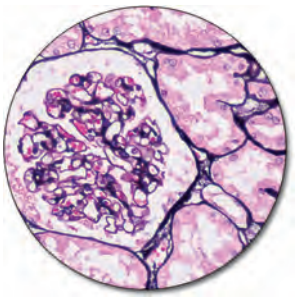


*Lung stained with GMS Eosin, Code AR376.*

### Jones' Basement Membrane (PAS-M) H&E Stain Kit, Artisan

IVD AR480 Ready-to-use 100 tests

Jones' Basement Membrane H&E Stain Kit is used to identify basement membranes, specifically glomerular and tubular basement membranes in renal tissue sections cut at 2 µm on the Artisan Link and Artisan Link Pro Staining Systems. The Bowman's capsule: black, inner basement membrane: black to gray, nuclei: blue, collagen, cytoplasm and other tissue elements: pink.

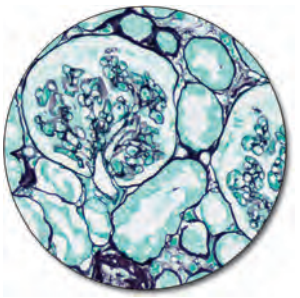


*Kidney stained with PAS-M H&E, Code AR480.*

### Jones' Basement Membrane (PAS-M) Light Green Stain Kit, Artisan

IVD AR380 Ready-to-use 50 tests

Jones' Basement Membrane Light Green Stain Kit is used to identify basement membranes, specifically glomerular and tubular basement membranes in renal tissue sections cut at 2 µm on the Artisan Link and Artisan Link Pro Staining Systems. The Bowman's capsule: black, inner basement membrane: black to gray, other tissue elements: light green.

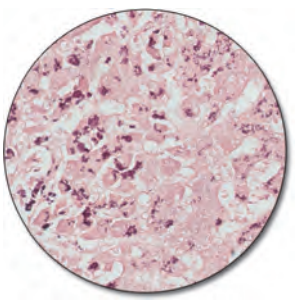


*Kidney stained with PAS-M Light Green, Code AR380.*

### Orcein Stain Kit, Artisan

IVD AR313 Ready-to-use 50 tests

Orcein Stain Kit is a stain technique used to identify viral inclusion bodies of hepatitis B surface antigen (HBsAG) and copper-associated proteins in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. Virus particles inside host cells are called viral inclusion bodies. A hepatitis B virus lies on the surface of the virus particle. HBsAG can be detected by using the Orcein staining method. The antigen appears as fine granules either diffusely spread throughout the cytoplasm or concentrated in the cytoplasm peripheral to the sinusoid space. Copper-associated proteins when in excessive pathologic amounts, such as Wilson's disease and some forms of cirrhosis, can be detected by using the Orcein staining method. HBsAG/elastin fibers: dark reddish brown, copper-associated protein: dark red-purple and background: pale pink-pink.



*Liver stained with Orcein for copper-associated protein, Code AR313.*

# Artisan Special Stains

We offer 30 Special Stains ranging from Acid-Fast Bacteria Stain Kit to Warthin-Starry Stain Kit. The onboard drying and deparaffinization feature, using the environmentally safe Artisan Clearing Solution, enables a total start to finish staining process on the Artisan Link and Artisan Link Pro Special Stains Staining System. The reagents are packaged in a patented reagent-sealed cartridge that provides fresh reagents to each slide. The precision dispensing of reagents results in optimal staining quality. The Artisan Link and Artisan Link Pro Special Stains Staining System includes the DakoLink software which has reagent and slide tracking using a 2D barcode system with the ability to connect up to three instruments to one workstation.

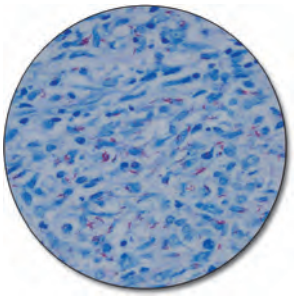
**The Special Stains kits in this section are suitable for all versions of Artisan, i.e. Artisan Link Pro, Artisan Link and Artisan Classic.**



### Acid-Fast Bacteria (AFB) Stain Kit, Artisan

IVD AR162 Ready-to-use 50 tests/100 tests

Acid-Fast Bacillus (AFB) Stain Kit is intended to identify acid-fast bacteria, such as *Mycobacterium*, in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. Application of Carbol Fuchsin stains acid-fast bacteria red, followed by decolorization of all tissue elements except the acid-fast bacteria. A Methylene Blue counterstain is then applied to impart a blue color to all background tissue elements.

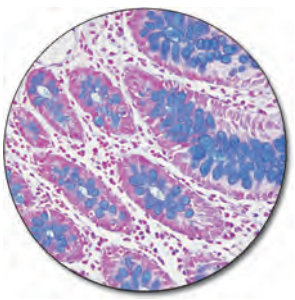


*Colon stained with AFB, Code AR162.*

### Alcian Blue pH 2.5 Stain Kit, Artisan

IVD AR160 Ready-to-use 50 tests/100 tests

Alcian Blue pH 2.5 Stain Kit is intended to identify weakly sulfated mucins in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. At pH 2.5, acidic mucopolysaccharides stains blue. A Nuclear Fast Red counterstain will stain the nuclei red to pink and all other tissue elements a pale pink.

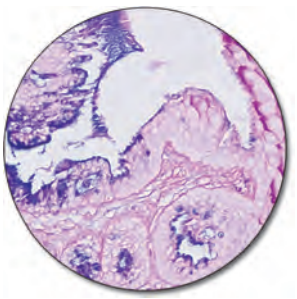


*Small intestine stained with Alcian Blue pH 2.5, Code AR160.*

### Alcian Blue/PAS Stain Kit, Artisan

IVD AR169 Ready-to-use 50 tests/100 tests

Alcian Blue/PAS Stain Kit is intended to identify acidic and neutral mucins in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. This procedure clearly separates the acidic and neutral mucins by color and can be used to distinguish all mucins in tissue sections. Alcian Blue pH 2.5 stains the acid mucin blue while the Schiff's reagent stains the neutral mucins pink to red. Mixtures of the two mucins will appear purple due to the positive reactions with both Alcian Blue and Schiff's reagent. This stain can be used with the digestive enzyme, Artisan Alpha-Amylase (Code AR171), for the demonstration of glycogen in tissue.

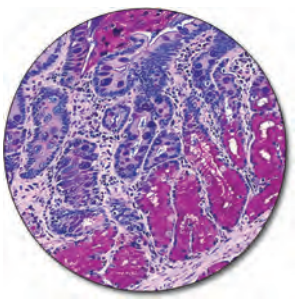


*Small intestine stained with Alcian Blue/PAS, Code AR169.*

### Alcian Blue/PAS/Hematoxylin Stain Kit, Artisan

IVD AR178 Ready-to-use 50 tests/100 tests

Alcian Blue/PAS/Hematoxylin Stain Kit is intended to identify acidic and neutral mucins in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. This procedure clearly separates the acidic and neutral mucins by color and can be used to distinguish all mucins in tissue sections. Alcian Blue pH 2.5 stains the acid mucin blue while the Schiff's reagent stains the neutral mucins pink to red. Mixtures of the two mucins will appear purple due to the positive reactions with both Alcian Blue and Schiff's reagent. A hematoxylin counterstain is then applied to impart a blue/black color to the nuclei.

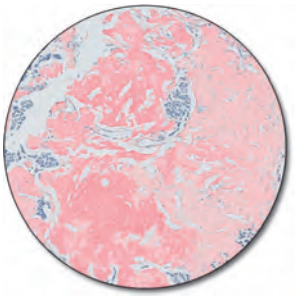


*Large intestine stained with Alcian Blue/PAS/Hematoxylin, Code AR178.*

### Congo Red Stain Kit, Artisan

IVD AR161 Ready-to-use 50 tests/100 tests

Congo Red Stain Kit is used to identify amyloid in tissue sections on Artisan Link and Artisan Link Pro Staining Systems. Amyloid is an abnormal protein product that can be found in various pathologic conditions. This stain demonstrates amyloid in pink to dark pink with light (bright field) microscopy or the characteristic apple green bi-refringence with polarized light. Mayers Hematoxylin is used as a counterstain. This stain has been optimized with 8 µm thick tissue sections

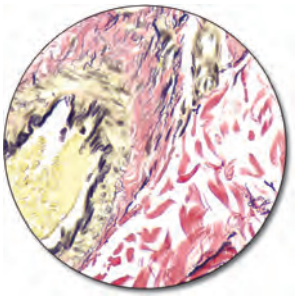


*Amyloid stained with Congo Red, Code AR161.*

### Elastic Stain Kit, Artisan

IVD AR163 Ready-to-use 50 tests/100 tests

Elastic Stain Kit is used to identify elastin fibers in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. This stain utilizes Alcoholic Hematoxylin, Ferric Chloride and Lugol's Iodine solutions to stain elastin fibers. Van Gieson's solution is added to differentiate collagen from elastin. Elastin fibers are stained black while remaining tissue elements are stained as follows: nuclei: blue/black, collagen: red, and other tissue elements: yellow.

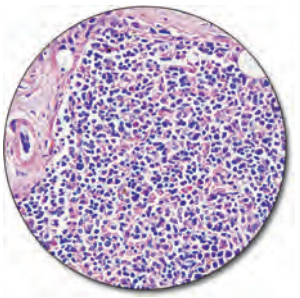


*Skin stained with Elastic Stain, Code AR163.*

### Giemsa Stain Kit, Artisan

IVD AR164 Ready-to-use 50 tests

Giemsa Stain Kit is typically used to identify hematopoietic cells (i.e. mast cells, basophils, polymorphoncuclear leucocytes, etc.) in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. In tissue specimens it will stain mast cells, which may be useful in the identification of mast cell tumors. Although Giemsa stains are frequently used to study bone marrow specimens as an aid in assessment of blood disorders, this Giemsa Stain Kit is not designed for this application. The tissue elements are stained as follows: Mast cell granules: purple, basophils: purple, eosinophils: bright pink and lymphocytes: blue. This stain is not recommended for cytology specimens or bone marrow smears.

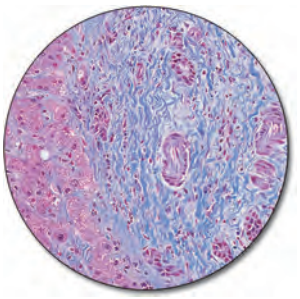


*Spleen stained with Giemsa, Code AR164.*

### Gomori's Blue Trichrome Stain Kit, Artisan

IVD AR167 Ready-to-use 50 tests

Gomori's Blue Trichrome Stain Kit is used to identify collagen fibers in liver and kidney tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. Gomori's Blue Trichrome Stain is often used to demonstrate increased collagen deposition that is associated with replacement of functional tissue by scar tissue. This stain is useful in the asessment of cirrhosis of the liver in which thickened collagen replaces normal tissue causing liver dysfunction. In Gomori's one-step procedure, the collagen and nuclei are stained blue, cytoplasm, erythrocytes and fibrin are stained pink to red.

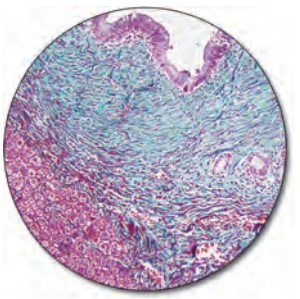


*Liver stained with Gomori's Blue, Code AR167.*

### Gomori's Green Trichrome Stain Kit, Artisan

IVD AR166 Ready-to-use 50 tests

Gomori's Green Trichrome Stain Kit is used to identify collagen fibers in liver and kidney tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. Gomori's Blue Trichrome Stain is often used to demonstrate increased collagen deposition that is associated with replacement of functional tissue by scar tissue. This stain is useful in the assessment of cirrhosis of the liver in which thickened collagen replaces normal tissue causing liver dysfunction. In Gomori's one-step procedure, the collagen and nuclei are stained green, cytoplasm, erythrocytes and fibrin are stained pink to red.

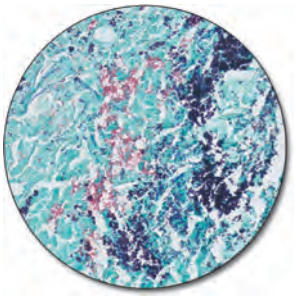


*Intestine stained with Gomori's Green, Code AR166.*

### Gram Stain Kit, Artisan

IVD AR175 Ready-to-use 50 tests/100 tests

Gram Stain Kit is used to identify two distinct groups of microorganisms in tissue sections on Artisan Link and Artisan Link Pro Staining Systems. Those that retain primary dye (Crystal Violet) are called Gram-positive. Those that lose the primary dye during decolorization are called Gram-negative. Mechanisms of Gram-positive organisms retaining the primary stain and Gram-negative organisms losing the primary stain are the result of the chemistry and structure of the organism's cell walls. The tissue elements are stained as follow: Gram-positive organisms: blue, Gram-negative organisms: red and background: varying shades of blue/green.

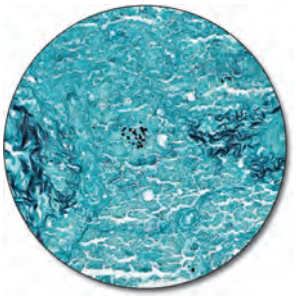


*Skin stained with Gram, Code AR175.*

### Grocott's Methenamine Silver (GMS) Stain Kit, Artisan

IVD AR176 Ready-to-use 50 tests/100 tests

Grocott's Methenamine Silver (GMS) Stain Kit is intended to identify fungal organisms and *Pneumocystis jiroveci* (formerly known as *carinii*) in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. Fungi and *Pneumocystis jiroveci* are stained black while other tissue elements are stained green. This stain is not recommended for cytology specimens.

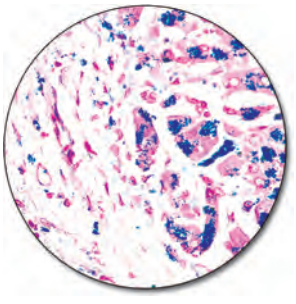


*Lung stained with GMS, Code AR176.*

### Iron Stain Kit, Artisan

IVD AR158 Ready-to-use 50 tests/100 tests

Iron Stain Kit is used to identify iron pigment in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. Iron is an important component of the human body, especially as a vital constituent of oxygen carrying hemoglobin. Iron is stored in bone marrow, and a loss of iron stores is indicative of anemia. An excess of iron deposited in organs such as liver, spleen, and bone marrow may be a result of hemachromatosis. Ferric deposits: blue, nuclei: red, and the background tissue elements are stained pink. This stain is not recommended for bone marrow smears.

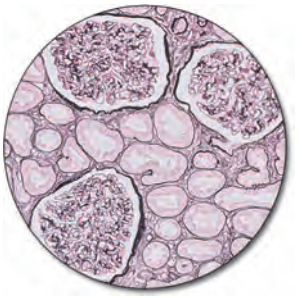


*Liver stained with Iron, Code AR158.*

### Jones' Basement Membrane (PAS-M) Stain Kit, Artisan

IVD AR180 Ready-to-use 50 tests/100 tests

Jones' Basement Membrane Stain Kit is used to identify basement membranes, specifically glomerular and tubular basement membranes in renal tissue sections cut at 2 µm on the Artisan Link and Artisan Link Pro Staining Systems. The Bowman's capsule: black, inner basement membrane: black to gray, nuclei: red, collagen: rose and cytoplasm and other tissue elements: pink.

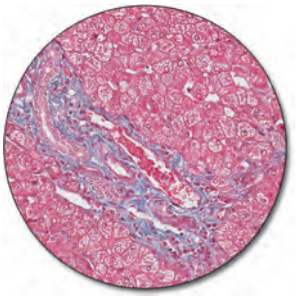


*Kidney stained with PAS-M, Code AR180.*

### Masson's Trichrome Stain Kit, Artisan

IVD AR173 Ready-to-use 50 tests/100 tests

Masson's Trichrome Stain Kit is used to identify muscle, collagen fibers, fibrin and erythrocytes in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. Masson's Trichrome is often used to demonstrate increased collagen deposition that is associated with replacement of functional tissue by scar tissue. This is useful in the assessment of sclerosis of the liver in which thickened collagen replaces normal tissue causing liver dysfunction. Muscle: red, collagen: blue, fibrin: pink, erythrocytes: red and nuclei: blue/black.

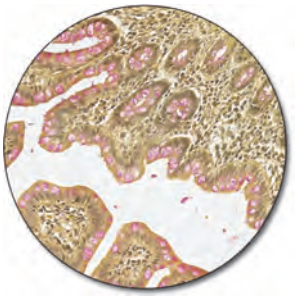


*Liver stained with Masson's Trichrome, Code AR173.*

### Mucicarmine Stain Kit, Artisan

IVD AR168 Ready-to-use 50 tests/100 tests

Mucicarmine Stain Kit is used to identify epithelial mucins in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. These mucins are a family of polysaccharides covalently linked to proteins in epithelial cells. The mucins: pink, nuclei: black and other tissue elements: yellow.

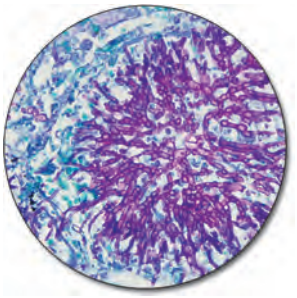


*Small intestine stained with Mucicarmine, Code AR168.*

### PAS-Green Stain Kit, Artisan

IVD AR172 Ready-to-use 50 tests/100 tests

PAS-Green Stain Kit is used to identify fungi in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. The most commonly used application is for demonstrating fungi in skin infections. Unlike GMS, the PAS-Green technique will not stain all fungi and yeast. However, fungi typically found in dermatologic specimens are commonly identified using PAS-Green. Positive fungi: magenta and the remaining tissue elements: blue/green.

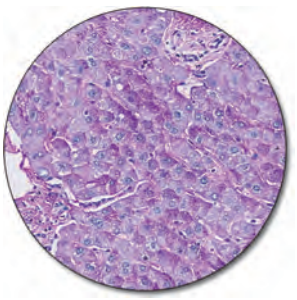


*Skin stained with PAS-Green, Code AR172.*

### Periodic Acid-Schiff (PAS) Stain Kit, Artisan

IVD AR165 Ready-to-use 50 tests/100 tests

PAS Stain Kit is used to identify glycogen in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. PAS-positive entities and structures are also numerous in tissue sections. The most common application is for demonstrating glycogen in the liver. Duplicate sections are stained with or without a pre-treatment, such as the Artisan Alpha-Amylase (Code AR171), which is a glycogen-digesting enzyme. Comparing PAS signal intensity in a digested tissue sample with one that has not been digested will give an indication of the amount of glycogen present. A loss of glycogen may be indicative of a metabolic disorder or damage to the liver. Positive glycogen: magenta, nuclei: blue and the background: pink.

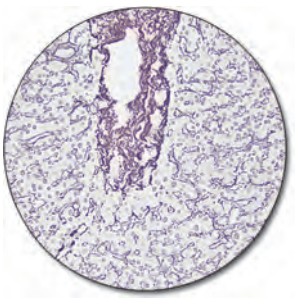


*Liver stained with PAS, Code AR165.*

### Reticulin/No Counterstain Stain Kit, Artisan

IVD AR182 Ready-to-use 100 tests

Reticulin/No Counterstain Stain Kit is used to identify a primitive form of connective tissue, called reticulin, in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. An Ammoniacal Silver Nitrate solution is applied to stain the reticulin fibers in tissue. The silver is then reduced and toned to produce a black coloration of the fibers, which are visible by light microscopy. A counterstain may be applied off line.

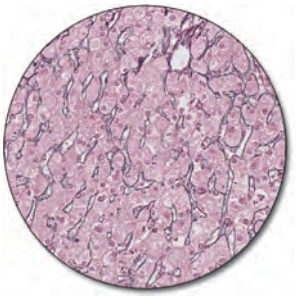


*Liver stained with Reticulin/No Counterstain, Code AR182.*

### Reticulin/Nuclear Fast Red Stain Kit, Artisan

IVD AR179 Ready-to-use 50 tests/100 tests

Reticulin/Nuclear Fast Stain Kit is used to identify a primitive form of connective tissue, called reticulin, in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. An Ammoniacal Silver Nitrate solution is applied to stain the reticulin fibers in tissue. The silver is then reduced and toned to produce a black coloration of the fibers, which are visible by light microscopy. Other tissue elements will be stained pink.



*Liver stained with Reticulin/NFR, Code AR179.*

### Warthin-Starry Stain Kit, Artisan

IVD AR181 Ready-to-use 50 tests/100 tests

Warthin-Starry Stain Kit is used to identify *Helicobacter pylori*, spirochetes and other microorganisms in tissue sections on the Artisan Link and Artisan Link Pro Staining Systems. *H. pylori* and spirochetes are stained black while the background is stained golden yellow.

*Helicobacter stained with Warthin-Starry, Code AR181.*

# Dako Academy

# Introduction to the Dako Academy

Within the Dako Academy, our customers will find everything they need to obtain a comprehensive understanding for the successful use of Dako products. We also provide ample opportunities for proficiency development in a number of specialty areas, utilizing the latest technology in respect to reagents, kits, detection, technique and instrumentation.

The Dako Academy offers an extensive customer support program ranging from on-site operator training sessions, to renowned educational manuals. We host scientific seminars and facilitate the sharing of knowledge, expertise and experience amongst anatomical pathology labs.

**The scope of Dako Academy covers:**

- Training
- Literature
- e-Learning
- Events

We look forward to seeing you in one of our training facilities or courses.

## Providing the right knowledge and skills for improved patient diagnostics

# Training

The Dako Academy offers a broad selection of training sessions in order to develop and increase your laboratory staff's confidence and competence. Theoretical education is combined with instruction and hands-on sessions employing Dako reagents and instruments.

Lectures and laboratory sessions are divided and tailor-made for the participants, enhancing the skills of both beginners and experts through small classes and individual attention. For information about course fees and course schedules, please contact your Dako Key Account Manager.

## Course Credits

Building on our extensive experience of providing world-class training, Dako has put together a wide variety of courses within pathology that build on each other in order to reach advanced competency levels. Dako course certificates are appreciated by many pathology departments, to document their competence development work.

For courses conducted in our United States facilities, all administered course contact hours are recorded with the American Society of Clinical Laboratory Scientists (ASCLS) and Professional Acknowledgement for Continuing Education (P.A.C.E.®).

## Locations

Dako Academy has three major training centers providing state-of-the-art facilities for advanced customer training, one center in Europe, one in the United States and one in Shanghai. For other locations or on-site training, please contact your Dako Key Account Manager.

Please note that some training courses may not be available on all locations.

### Dako Academy, Europe

Location: Dako Denmark A/S
Produktionsvej 42
DK-2600 Glostrup, Denmark
E-mail: jette.hviid@agilent.com

### Dako Training Academy Center, US

Location: Agilent Center of Excellence
5301 Stevens Creek Blvd
Santa Clara, CA 95051-7201, USA
E-mail: training.department@agilent.com

### Dako Academy, China

Location: Dako Diagnostics (Shanghai) Co., Ltd.
17F, Citic Plaza
No.1350 North Sichuan Rd.
Shanghai, China
E-mail: jette.hviid@agilent.com

## Courses

With a focus on Dako solution areas, the courses conducted on a regular basis in our training centers include:

- Dako Omnis System and Immunohistochemistry
- Autostainer Link 48 System and Immunohistochemistry
- Artisan Link Pro Special Staining System and Special Stains
- Dako CoverStainer (H&E)

You will find further training opportunities under the heading "Training On-Demand".



### Dako Omnis System and Immunohistochemistry (IHC)

**Course description:** Covers the theory and practice of performing immunohistochemical stainings utilizing the Dako Omnis solution. The training consists of a system overview, daily use and advanced training on instrument and workstation software. On completion of this course, trainees will have the expertise to work independently with the system.

**Course covers:**

- A comprehensive training on the Dako Omnis hardware and software applications
- Laboratory sessions utilizing Dako Omnis system
- Quality Control and troubleshooting sessions
- A review of various RTU antibodies and detection chemistry

**Length:** Four days

### Autostainer Link 48 System and Immunohistochemistry (IHC)

**Course description:** Covers the theory and practice of performing immunohistochemical stainings using Autostainer Link 48 system. The lecture component incorporates a review of frequently used IHC stains and their diagnostic implications. Laboratory sessions utilize automated platforms to demonstrate immunostaining performance, quality control, troubleshooting, open system architecture, data transfer and instrument management.

**Course covers:**

- A comprehensive training on the Autostainer Link hardware and client software applications
- Laboratory sessions utilizing the Autostainer Link 48 system
- A review of various antibodies and detection chemistries, along with quality control and effective troubleshooting methods

**Length:** Three days

## Artisan Link Pro Special Staining System and Special Stains

**Course description:** Covers the theory and practice of performing histochemical stains on the Artisan Link Special Staining System.

**Course covers:**

- Lecture session, including a review of frequently used special stains and their diagnostic application, as well as a comprehensive overview of the Artisan hardware and software applications
- Laboratory sessions utilizing Artisan Link Pro for performing a variety of special stains
- Slide reviews and troubleshooting session

**Length:** Two days

## Dako CoverStainer (H&E)

**Course description:** Includes the theory and practice of performing Hematoxylin and Eosin (H&E) staining on the Dako CoverStainer Reagent Management System (RMS). Lectures incorporate workflow, staining performance, optimization, troubleshooting, maintenance, and hands-on laboratory sessions.

**Course covers:**

- A comprehensive overview of the Dako CoverStainer hardware and software applications
- Laboratory sessions using Dako CoverStainer
- Effective troubleshooting methods
- A review of basic procedures and recommended laboratory practice associated with high-quality H&E staining

**Length:** Two days

# Training On-Demand

Adding to our regular course portfolio, Dako Academy offers a wide range of on-demand courses in order to meet specific needs. If you do not find what you are looking for, please contact your Dako Key Account Manager.

## Immunohistochemistry

**Course description:** This popular course covers the basic theory and practice of immunohistochemistry.

**Who should attend:** Basic and intermediate level trained technicians

**Course covers:**

- Lecture component focuses on principles of pre-treatment, antibody and detection use and basic histology as it relates to quality immunostaining
- Laboratory sessions cover manual and automated immunostaining, troubleshooting and quality control
- Regulatory guidelines issued by the College of American Pathologists (CAP) are also covered for US participants

**Length:** Three days

## pharmDx Introduction Workshop

**Course description:** Targeted therapy has created the need for reliable and reproducible assays to aid in the assessment of eligible patients. The intent of personalized medicine requires tests that consistently provide relevant, accurate results. The pharmDx family of kits was developed and validated to fulfill this need. As pharmDx results will depend on strict adherence to protocols, workshop participants will be taken step-by-step through the entire assay procedure. Participants will also be introduced to approved scoring methods for achieving results with minimal intra and inter-laboratory variability.

**Who should attend:** Laboratory technicians and pathologists

**Course covers:**

- One pharmDx assay is covered per workshop
- Workshops will focus on either interpretation or technical components

**Length:** One day

## Interpretation Workshop

**Course description:** Skilled pathologists facilitate this workshop in a forum setting, utilizing both virtual images and microscope slides. Participants are encouraged to bring additional cases from their respective laboratories.

**Who should attend:** Clinical pathologists

**Course covers:**

- Detailed instruction in the practical use of assays, interpretative parameters and interactive assessment of provided sample cases

**Length:** One day

# Training On-Demand (continued)

## Technical Workshop

**Course description:** Includes a lecture on the biology of the assay target and description of test components. Adherence to protocols is strongly emphasized throughout the workshop. Microscope slides are used to demonstrate appropriate results and potential staining artifacts.

**Who should attend:** Immunotechnicians

**Course covers:**

- Pharmacodiagnostics overview
- Review of kit components and protocols
- Hands-on laboratory sessions utilizing the Autostainer Link 48, Autostainer Plus or manual staining
- Troubleshooting

**Length:** One day (immunohistochemistry)
Two days (in situ hybridization)



## FISH/ISH

**Course description:** This course presents basic in situ hybridization training.

**Who should attend:** Technicians performing or expecting to perform in situ hybridization techniques

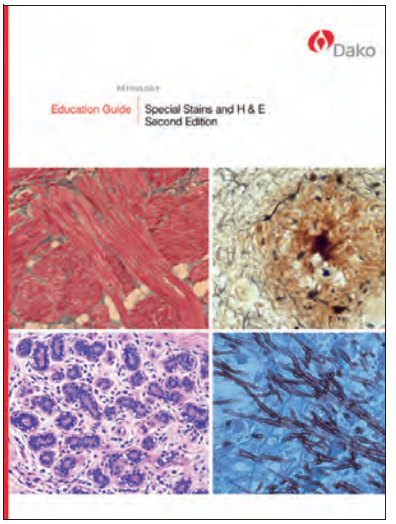
**Course covers:**

- Lecture component covers molecular pathology theory, denaturation, hybridization and detection
- The laboratory sessions include manual as well as automated hybridization, and methods for detection of hybridized probes

**Length:** Three days

# Literature

Dako offers educational materials and guidebooks to ensure your success in using our products. You can download it from our Web site or contact your Dako Key Account Manager for further information.



## Education Guides

Dako Education Guides are well-known for providing valuable insights into the theoretical basis and methodology for different disciplines, including interpretation of staining results.

- Immunohistochemical Staining Methods, Sixth Edition (2013)
- The Illustrated Guide to Bone Marrow Diagnosis, Second Edition (2009)
- Demasking of Antigens, Second Edition (2008)
- Special Stains and H&E, Second Edition (2010)

## Interpretation Manuals and Guidelines

Based on experience and guidelines from renowned experts, we have gathered interpretation advice and guidelines to help achieve reliable and reproducible results. Utilization of the guidelines will ensure that your laboratory achieves quality results.

- HercepTest - Breast Cancer or Gastric Cancer
- EGFR pharmDx
- c-Kit pharmDx
- ER/PR pharmDx
- *HER2* IQFISH pharmDx
- FLEX RTU Atlas of Stains, Fourth Edition
- Atlas of Special Stains
- PD-L1 IHC 22C3 pharmDx
- PD-L1 IHC 28-8 pharmDx

## Procedures

In order to minimize the possibilities for error, a quick and easy solution is to use our step-by-step procedures. The use of these procedures has proven efficient for many laboratories.

- Immunohistochemical staining
- General ELISA Procedure
- Immunovisualization of protein blots
- *HER2* IQFISH pharmDx
- FISH procedures for cytology and histology samples
- CISH procedures for manual use, Autostainer, Autostainer Plus and Autostainer Link 48

# Literature (continued)

## Product Manuals

To facilitate work tasks and procedures for laboratory personnel when interacting with our instruments, we provide a complete series of easy to use manuals for all our instruments. Logically structured and available in nine different languages, the three types of Dako manuals will quickly provide the information for which you are looking.

- User Guides
- Quick Start Guides
- Handbooks

## White Papers, Reviews, Studies and Webinar

In close collaboration with experts in the field, we publish white papers, reviews and studies on various pathology topics and related technologies. These publications are available online at www.dako.com.

- Prostate Pathology Review
- IQFISH White Paper
- Dynamic Gap Staining
- Standards for IHC Controls, webinar



# e-Learning

We offer multiple training opportunities to our customers, one of those opportunities includes easy-to-use, interactive e-Learning programs. Dako e-Learning programs are designed to quickly provide laboratory technicians, pathologists and scientists worldwide with accurate information on how to achieve reliable results using Dako products.

## HercepTest e-Learning

This HercepTest e-Learning program is developed to supply laboratory technicians and pathologists with accurate and fast knowledge of how to achieve reliable staining results and accurate interpretation with HercepTest.

**The e-Learning program includes:**

- A general introduction to HER2 testing and biology
- Description of HercepTest kits
- Overview of the complete manual and automated laboratory procedures
- Interpretation guidelines
- Interpreting artifacts
- Troubleshooting
- Tests for personal training as a HercepTest user

## CISH e-Learning

This e-Learning program is developed to supply laboratory technicians and pathologists with accurate and fast knowledge of how to achieve reliable staining and accurate interpretation with *HER2* CISH pharmDx Kit.

**The e-Learning program includes:**

- General introduction to the CISH technology
- Product presentation
- Photo presentation of the complete laboratory procedure
- Interpretation guide
- Q&A
- Troubleshooting section
- Test for personal evaluation for procedure and interpretation
- Test for Web-based certification for the procedure and interpretation

## e-Learning (continued)

### PD-L1 IHC 22C3 pharmdDx Pathology Training Program

The Dako PD-L1 IHC 22C3 pharmDx pathology training program uses in-depth content, engaging activities, and comprehensive cases to help you confidently:

**The e-Learning program includes:**

- Understand the core principles of PD-L1 pathology
- Learn the process for evaluating stained images for PD-L1 expression
- Recognize confounding considerations that affect PD-L1 scoring
- Score and interpret images for PD-L1 expression across a variety of patient samples

## Events

We support a wide number of events in the pathology community to facilitate knowledge sharing and feedback opportunities for our customers. We are also renowned for supporting and arranging opportunities for scientists and laboratory personnel to meet and discuss hands-on findings and research results.

### User Group Meetings

Having lasting partnerships and listening to our customers have always been priorities for us. Through our field personnel we strive to provide our customers with opportunities to share knowledge with each other and with us.

Our user group meetings allow customers to provide direct feedback and suggestions on further improvement of Dako solutions and customer support. These meetings are crucial in our efforts to develop products that meet customer-specific requirements.

**We've been listening!**

# Service and Support

# Introduction to Service and Support

Service and Support has a dedicated team of highly skilled and experienced service professionals ready to work with you to improve your laboratory workflow. We are committed to ensure that our customers feel confident in using our products by providing state-of-the-art service and support.

**The Service and Support offerings include:**

- Deployment Services
- Instrument Services
- Application and Technical Support
- Instrument Service Agreements

Deployment Services ensures that Dako systems are installed correctly and perfectly integrated into the facility's network, Instrument Services see to that instruments run smoothly and in the event of any problems, resolves it promptly. Application and Technical Support provide on-site training, optimize software performance and ensure fast troubleshooting.

As a manufacturer and supplier of instruments, software and reagents, Dako provides its Field Personnel with the latest tools and all necessary training in order to get the most out of our products. Using Dako Service and Support, you as a customer can feel confident that your laboratory always performs at its best.

Instrument Service Agreements facilitate the budget process by providing pre-packaged service solutions in different price levels.

## When you need us, we will be there

# Deployment Services

Our deployment team has a long history of service excellence. Software installation and implementation of advanced systems all over the world has provided us with an experience level that few in the industry can match. We have an extensive practice of complex Local Area Network (LAN) and Laboratory Information System (LIS) integrations, and we have a thorough knowledge base regarding possible IT security concerns and how to solve them.

**Deployment Services include:**

- Presite Inspection
- Installation Qualification
- Operational Qualification
- Connectivity

## Presite Inspection

To prepare for a quick and smooth installation, the Presite Inspection service provides invaluable assistance. Potential surprises are avoided if the installation site has been inspected. Everything that needs to be in place for a trouble-free installation is investigated.

This includes physical location and support, water and electrical supply, waste water dispense, ventilation and light. The Presite Inspection often render in recommendations that will further improve ease of use and productivity of the instrument.

## Installation Qualification

When an instrument is installed the Installation Qualification (IQ) process makes sure that this is done according to Dako specifications. The IQ verifies that all parts shipped were received and that software updates are compatible with the configuration of the instrument.

By performing an IQ you are certain that the instrument performs correctly and comply with regulatory standards. An IQ check is performed in connection with the installation of a new instrument and is also recommended if a new functionality is added, e.g. through a software upgrade, and whenever the instrument is relocated.

## Operational Qualification

An Operational Qualification (OQ) process ensures that the instrument has the necessary accuracy in order to meet performance and quality standards. This also ensures that the instrument meet specific performance criteria by using a controlled test environment. An OQ check is performed in connection

with the installation of a new instrument and is also recommended if a new functionality is added, e.g. through a software upgrade, and whenever the instrument is relocated. An OQ check can also be performed with regular time intervals according to your Service Contract to guarantee optimal instrument performance.

## Connectivity

The middleware solution – DakoLink – enables Dako instruments to connect to other laboratory instruments and to the laboratory and hospital information systems. Integration into hospital LIS and LAN in order to exchange information for test cases, requires a thorough understanding of the complexity and a long experience of solving

similar communication issues. Dako has long standing relationships with all LIS vendors on the market and Dako Deployment Services ensures that software integration is handled quickly and professionally.

# Instrument Services

Dako Instrument Services provides fast and professional support when hands-on assistance is required by our customers.

A global network of field personnel, all of which are regularly trained on the latest products and service techniques, ensure that we can resolve any issue you may have in the fastest way possible.

Dako is widely recognized for our high standards for how to deliver service and support. This is a reputation that we intend to keep regardless of whether we provide support remotely, over the phone or through hands-on assistance.

**Instrument Services include:**

- Planned Maintenance
- Corrective Maintenance
- Software Upgrades

## Planned Maintenance

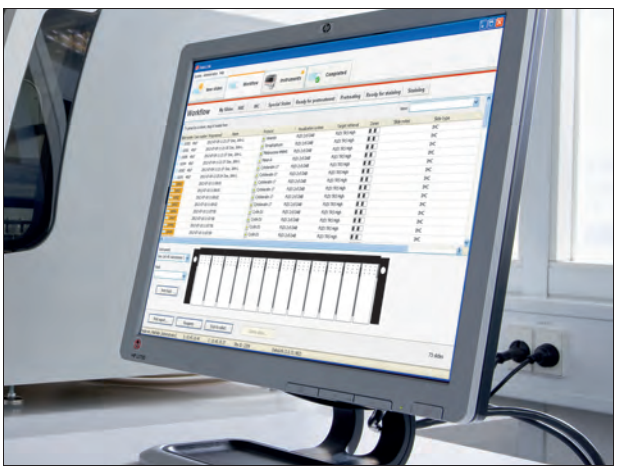
Planned Maintenance (PM) covers your instrument's routine maintenance needs and is scheduled based on usage and time. Dako PMs are of course planned so that they do not interfere with laboratory activities, and at the same time you can be sure that your instrument is always running at peak performance.

## Corrective Maintenance

Corrective Maintenance offers you the security that your laboratory requires in the event of any unforeseen problems. Our Service Engineers have excellent troubleshooting expertise that includes both fluidics and electronics combined with strong IT skills. This, combined with short response times, keeps instrument downtime to a minimum.

## Software Upgrades

The key enabler for managing Dako products in the laboratory is the DakoLink Path software. It links instruments and connects them to the laboratory information system while managing the performance of the individual instruments. On a regular basis, new functionality is added and new reagents are released which require upgrades to the software. These software upgrades are carried out as PMs in order not to interfere with laboratory activities.



# Application and Technical Support

We have been a leader within antibody-based cancer diagnostics for almost 50 years and our support to our customers when it comes to staining performance and optimizing reagent protocols is still recognized as the best in the market. We have a highly committed support organization that always provides you with professional and yet personal service.

With an extensive geographic presence, our local staff is always within easy reach. No matter where you are in the world, your dedicated Application Specialist or Technical Support Representative is just a phone call or e-mail away.

**Application and Technical Support include:**

- Protocol Optimization
- Protocol Design
- Product Demonstrations



## Protocol Optimization

Our Application Specialists and Technical Support Representatives are experts in troubleshooting and optimization, working closely together with you to ensure that our reagents operate at peak performance in your laboratory.

When you contact us, we know the importance of providing you with quick advice and competent troubleshooting relating to the use of our systems and reagents. Dako is organized worldwide with highly experienced staff that is able to assist you in choosing the right products and suggest how to optimize the performance of your protocols.

## Protocol Design

Make use of our unrivaled competence when it comes to choosing the correct reagents and combine them in the best possible way. We can perform assays in our laboratories in Carpinteria, USA and in Glostrup, Denmark or you can just send us your slides directly and we will optimize your protocols to your satisfaction.

## Product Demonstrations

We can provide you with all the documentation that is needed in order to get a good understanding for the advantages you will get by choosing us as your supplier. Nothing compares to hands-on experience where you and your colleagues can actually use the instrument and the reagents you are interested in in your own laboratory. Therefore we offer Product Demonstrations directly at customer sites for longer or shorter periods.

# Instrument Service Agreements

To continue to get the most out of your investment you can extend the benefits from the standard instrument warranty.

Dako Instrument Service Agreements can be found in three different Service Levels in order to meet your laboratory's unique requirements:

- Basic
- Essential
- Comprehensive

Each Service Level include different services and to ensure productivity and availability for critical systems, We can offer fast response times and priority handling for technical support and repairs. An Instrument Service Agreement can cover a single instrument or a complete set up of Dako instruments.

Instrument Service Agreements are also ideal in order to avoid unplanned expenses and as such a very cost-effective way to maximize your instrument's performance, matching your requirements with your budget constraints.

For more information on our Instrument Service Agreements and to discuss what Service level that would suit you the best, please contact your Dako Key Account Manager.

# General
# Product Information

## Monoclonal Antibodies

We produce a wide range of monoclonal mouse and monoclonal rabbit antibodies. Each antibody has been carefully selected on the basis of its value, either for research or for the analysis of pathological human cells by immunohistochemistry.

**Tissue Culture Antibodies**. With only a few exceptions, Dako monoclonal antibodies are produced in tissue culture. This gives advantages in the use of the antibodies. For example, background problems are virtually absent with such reagents because all the mouse immunoglobulin molecules are directed against the target antigen.

**Specificity.** Dako monoclonal antibodies are extensively screened on a multitude of tissue sections or other relevant biological material to ascertain that they possess the necessary specificity and give consistent, strong labeling reactions.

**Solvent.** Dako monoclonal antibodies are, generally, supplied in the liquid form. The majority of unconjugated antibodies are supplied as tissue culture supernatants containing 0.05 mol/L Tris/HCl, pH 7.2, and 15 mmol/L sodium azide. The azide can be removed by dialysis or gel filtration if it interferes with the use of the antibody. However, after removal of the azide, the antibody must be stored frozen.

**Storage.** 2-8 °C.

**Further Information.** A package insert is supplied with each vial of monoclonal antibody. It states intended/recommended use, clone, isotype, specificity, as well as recommended staining procedure when applicable. Package inserts are also avaliable on www.dako.com.

The products require no hazard labeling.

## Polyclonal Antibodies

Since 1966 we have produced a continually widening range of polyclonal antibodies. An extensive knowledge of protein chemistry and immunochemistry, careful selection of animals for immunization, and optimal, long-term immunization schemes have formed the basis of the high quality of our products.

Most of the polyclonal antibodies are *produced in rabbits*.
This provides several advantages:

Human antibodies reacting with rabbit immunoglobulins occur rarely. Therefore, rabbit antibodies can be used without risk of non-specific reactions even in sensitive techniques.

A batch of antibody will always consist of the pooled sera from a large number of animals. This eliminates the possibility of a single atypical antibody predominating and gives minimal batch-to-batch variation. Rabbit antibodies exhibit very broad precipitation curves, so precipitation will occur even at high antigen or antibody excess.

**Immunoglobulin Fractions.** All Dako polyclonal antibodies are offered in the form of immunoglobulin fractions with a few exceptions mentioned under the individual product. The immunoglobulin fraction is prepared by salting out and ion exchange chromatography. The elimination of bulk proteins gives a stable product with reduced background in gel precipitation techniques, and minimal non-specific reactions in other applications.

**Affinity-Isolated Antibodies.** Dako affinity-isolated antibodies are prepared by immunoaffinity chromatography, using antigens coupled to a solid matrix. The elution and adsorption techniques used, guarantee antibodies of high affinity.

**Specificity.** Monospecificity of Dako polyclonal antibodies is obtained by the use of highly purified antigens for immunization. Traces of sometimes unavoidable, unwanted antibodies are removed by liquid or, in the majority of cases, solid-phase absorption. Crossed immunoelectrophoresis, with its high sensitivity and resolving power, is included in our specificity controls. For this test, antibody is used at a very high concentration (12.5 microliters per square cm of gel).
For a steadily increasing number of antibodies the specificity is also ascertained by ELISA. Antibodies which are specified "for immunohistochemistry only" have not necessarily been subjected to the above specificity tests.

**Antibody Titre.** The titre variation between batches of uncon-jugated polyclonal antibodies is less than 10%. The titre of most antibodies is measured by single radial immunodiffusion (SRI) (1). The SRI titre states how many milligrams of antigen which is precipitated in an agarose gel by 1 L of antibody.

**Application.** Because of their high purity and avidity, Dako unconjugated polyclonal antibodies are generally well-suited for a variety of techniques.

In addition, our immunohistochemistry laboratory as well as numerous investigators have shown for a large number of Dako unconjugated polyclonal antibodies, that they give highly specific immunohistochemical reactions when used as primary antibodies in *immunofluorescence or immunoenzymatic techniques*. The intended/recommended use of each antibody is stated in the package insert.

## Polyclonal Antibodies (continued)

**Protein Concentration.** For Dako concentrated, unconjugated polyclonal rabbit antibodies (immunoglobulin fractions) the protein concentration is stated on the label of each vial.

**Solvent.** All antibodies are offered in liquid form. For unconjugated antibodies in the form of immunoglobulin fractions, the solvent is 0.1 mol/L sodium chloride, 15 mmol/L sodium azide.

**Storage.** We recommend that our antibodies be stored at 2-8 °C. When stored in this manner, loss of antibody activity for unconjugated antibodies is approximately 2% per year.

**Further Information.** A package insert is supplied with each vial of polyclonal antibody. It states immunogen and specificity, and gives additional product-specific information. Package inserts are also available on www.dako.com.

The products require no hazard labeling.

**Reference**

1. Becker W. Determination of antisera titres using the single radial immunodiffusion method. Immunochem 1969;6:539-46.

## Biotinylated Antibodies

**Characterization.** Dako biotinylated antibodies have been prepared according to principles described by Bayer and Wilchek (1). The antibodies are covalently linked to biotin using an aminocaproic acid spacer arm. By dialysis or gel filtration, free biotin is removed from the conjugates. An optimal biotin/protein ratio ascertains a high activity of the biotinylated antibodies without giving non-specific reactions.

**Application.** Dako biotinylated antibodies in conjunction with avidin and streptavidin conjugates are typically used for immunohistochemistry. Detailed working procedures for immunohistochemical staining methods using Dako biotinylated secondary antibodies are available on request. In addition, these reagents are useful for immunoblotting and ELISA.

Working dilutions should be optimized for each individual system. However, for immunohistochemistry the dilutions are usually in the range of 1:200-1:800, for immunoblotting about 1:1000-1:4000, and for ELISA about 1:5000-1:20 000.

**Solvent.** The biotinylated antibodies are offered in liquid form containing 15 mmol/L sodium azide.

**Storage.** 2-8 °C.

**Further Information.** A package insert is supplied with each vial of biotinylated antibody. It provides product-specific details. Package inserts are also available on www.dako.com.

The products require no hazard labeling.

**Reference**

1. Bayer E, Wilchek M. The use of the avidin-biotin complex as a tool in molecular biology. Methods Biochem Anal 1980;26:1-45.

## Alkaline Phosphatase-Conjugated Antibodies

**Characterization.** Dako alkaline phosphatase-conjugated antibodies have been prepared by a modified one-step glutaraldehyde method from affinity-isolated antibodies and calf intestinal alkaline phosphatase (AP) of the highest specific enzymatic activity available. By gel filtration, the majority of unconjugated antibody molecules and free alkaline phosphatase have been removed from the conjugates.

**Application.** Typical applications of Dako alkaline phosphatase-conjugated antibodies are in immunohisto-chemistry, in ELISA and in immunoblotting techniques. Working dilutions should be optimized for each individual system, but are usually in the range 1:20-1:100 for immunohistochemistry, and about 1:500-1:4000 for ELISA and immunoblotting.

**Solvent.** The conjugates are offered in liquid form in Tris-buffered saline, 15 mmol/L sodium azide, pH 7.2. They are stabilized with 1% bovine serum albumin or 40% glycerol.

**Storage.** 2-8 °C.

**Substrates and Couplers for Alkaline Phosphatase Staining.** For staining of tissue sections and cell smears, the substrates naphthol AS-MX phosphate or naphthol AS-BI phosphate are recommended together with Fast Red TR, Fast Blue BB, or hexazotized New Fuchsin as couplers (1). Levamisole at a concentration of 1 mmol/L may be added to the staining solution to inhibit endogenous alkaline phosphatases in tissues and cells.

## Alkaline Phosphatase-Conjugated Antibodies (continued)

For immunoblotting, the substrates and couplers mentioned above for staining of tissues and cells can be used. Another good combination is 5-bromo-4-chloro-indolyl phosphate as substrate and nitro blue tetrazolium as coupler (2).

For ELISA, 4-nitrophenyl phosphate is the substrate most often used (3).

**Further Information.** A package insert is supplied with each vial of conjugate. It provides product-specific details. Package inserts are also available on www.dako.com.

The products require no hazard labeling.

**References**


1. Cordell JL, Falini B, Erber WN, Ghosh AK, Abdulaziz Z, Macdonald S, et al. Immunoenzymatic labeling of monoclonal antibodies using immune complexes of alkaline phosphatase and monoclonal anti-alkaline phosphatase (APAAP complexes). J Histochem Cytochem 1984;32:219-29.
2. Blake MS, Johnston KH, Russell-Jones GJ, Gotschlich EC. A rapid sensitive method for detection of alkaline phosphatase-conjugated anti-antibody on Western blots. Anal Biochem 1984;136:175-9.
3. Kan LVP, Verspaget HW, Pena AS. ELISA assay for quantitative measurement of human immunoglobulins IgA, IgG, and IgM in nanograms. J Immunol Methods 1983;57:51-7.


## Peroxidase-Conjugated Antibodies

**Characterization.** Dako peroxidase-conjugated antibodies have been prepared from the chromatographically purified immunoglobulin fraction of antisera or affinity-isolated antibodies and horseradish peroxidase (HRP) of the highest specific enzymatic activity available. The coupling reaction is a modification, developed at Dako, of the two-step glutaraldehyde method of Avrameas and Ternynck (1). The reaction is gentle, efficient, highly reproducible and gives conjugate molecules of molecular weight predominantly 200 000-240 000.

**Specificity.** The specificity of the antibodies is ascertained by crossed immunoelectrophoresis and, when applicable, by ELISA.

**Application.** Dako peroxidase conjugates are generally used for light and electron microscopy, enzyme-linked immunosorbent assays (ELISA), immunoblotting techniques, and amplification of immunoprecipitates in agarose gels. Working dilutions should be optimized for each individual system, but are usually for histological work in the range 1:20-1:200, for ELISA 1:500-1:2000, and for enzymatic amplification of immunoprecipitates and immunoblotting about 1:100-1:1000. Intended/recommended use and recommended dilutions are stated in the package insert.

**Solvent.** Peroxidase conjugates are sold in liquid form with preservative added.

**Storage.** Dako peroxidase-conjugated antibodies are very stable if kept undiluted at 2-8 °C.

**Chromogens for Peroxidase Staining.** For light and electron microscopy, diaminobenzidine (DAB) is recommended. Considerable enhancement of staining intensity can be obtained very simply by using DAB in conjunction with imidazole and heavy metal salts (2,3). For immunoblotting, tetramethylbenzidine (TMB) used as described by McKimm-Breschkin (4) produces a stable color of high intensity. The most sensitive stain for amplification of immunoprecipitates in agarose gels is 3-amino-9-ethylcarbazole (AEC) (5,6). DAB (7), TMB (4) and AEC can with advantage be prepared as stock solutions, thus easing the work, and especially for DAB, eliminating possible staining variations due to variable amounts of impurities present in small aliquots of DAB powder. Hydrogen peroxide should not be added to the staining solution until shortly before use.

Even at very high dose levels - 4-8 g/kg - DAB produces only minimal toxic effects in male rats and male mice, and has no effects in female mice (8).

For ELISA, orthophenylenediamine (OPD) and 3,3'-5,5'- tetramethylbenzidine (TMB) are good and very sensitive chromogens.

**Further Information.** A package insert is supplied with each vial of conjugate. It provides product-specific details. Package inserts are also available on www.dako.com.

The products require no hazard labeling.

**References**


1. Avrameas S, Ternynck T. Peroxidase labelled antibody and Fab conjugates with enhanced intracellular penetration. Immunochemistry 1971;8:1175-9.
2. Trojanowski JQ, Obrocka MA, Lee VMY. A comparison of eight different chromogen protocols for the demonstration of immunoreactive neurofilaments or glial filaments in rat cerebellum using the peroxidase-antiperoxidase method and monoclonal antibodies. J Histochem Cytochem 1983;31:1217-23.
3. Scopsi L, Larsson LI. Increased sensitivity in peroxidase immunocytochemistry. A comparative study of a number of peroxidase visualization methods employing a model system. Histochemistry 1986;84:221-30.
4. McKimm-Breschkin JL. The use of tetramethylbenzidine for solid phase immunoassays. J Immunol Methods 1990;135: 277-80.
5. Graham RC, Lundholm U, Karnovsky MJ. Cytochemical demonstration of peroxidase activity with 3-amino-9-ethyl-carbazole. J Histochem Cytochem 1965;13:150-2.
6. Broe MK, Ingild A. Amplification of immunoprecipitates in agarose gels by horseradish peroxidase-labelled antibody. Scand J Immunol 1983;17:255-8.
7. Pelliniemi LJ, Dym M, Karnovsky MJ. Peroxidase histochemistry using diaminobenzidine tetrahydrochloride stored as a frozen solution. J Histochem Cytochem 1980;28:191-2.
8. Weisburger EK, Russfield AB, Homburger F, Weisburger JH, Boger E, Van Dongen CG, et al. Testing of twenty-one environmental aromatic amines or derivatives for long-term toxicity or carcinogenicity. J Environ Pathol Toxicol 1978;2:325-56.

## Fluorescein-Conjugated Antibodies for Tissue Staining

Dako fluorescein-conjugated antibodies for tissue staining meet the stringent requirements suggested at international conferences on standardization in immunofluorescence.

**Characterization.** Chromatographically purified immunoglobulin fractions of antisera or purified monoclonal antibodies are conjugated with fluorescein isothiocyanate isomer 1 (FITC). After conjugation, unreacted FITC is completely removed by gel filtration on Sephadex G-25. A further purification is carried out by ion exchange chromatography. This process removes unconjugated antibody molecules and antibody molecules to which more than 4 molecules of FITC are attached. Thus, our conjugates consist of optimally labeled antibody molecules, and require no absorption with tissue powders prior to use.
The fluorescein/protein ratio, measured as the absorbance ratio A 495 nm/A 278 nm, is 0.65 ± 0.05 for all preparations, corresponding to a molar FITC/protein ratio of 2.3.

**Specificity and Performance Testing.** Before conjugation, the specificity of the antibodies is ascertained by crossed immuno-electrophoresis and ELISA, when applicable. After conjugation, the specificity and fluorescence are controlled by direct and indirect immunofluorescence methods.

**Working Dilutions.** Working dilutions of conjugates will depend on the type and the condition of the fluorescence microscope being used, and also on the tissue under investigation. For these reasons it is advisable for each individual laboratory to test various dilutions of a conjugate in order to find the optimal dilution. On human bone marrow/tonsil, the working dilutions of FITC-conjugated anti-human IgA, IgG and IgM are typically 1:20-1:40. No non-specific fluorescence is seen at a dilution of 1:20.

**Solvent.** For fluorescein-conjugated polyclonal antibodies, the solvent is phosphate-buffered saline, 15 mmol/L sodium azide, pH 7.2. For fluorescein-conjugated monoclonal antibodies the solvent is Tris-buffered saline, 15 mmol/L sodium azide, pH 7.2. They are stabilized with 1% bovine serum albumin.

**Storage.** Fluorescein-conjugated antibodies should be stored in the dark at 2-8 °C.

During storage a small precipitate may occasionally develop causing a fine granular non-specific staining. By a simple filtration (0.22 µm cellulose acetate filter), the original high quality of the conjugate will be restored. Conjugates should not be stored in diluted form.

**Retardation of Fluorescence Fading.** During microscopy a pronounced fading of the fluorescence emitted from FITC occurs. The addition of various chemicals to the mountant used for the immunofluorescence preparations is an efficient, simple and inexpensive means of retarding fading. For a detailed discussion of the preparation and features of anti-fading mountants, please see references 1, 2 and 3.

**Further Information.** A package insert is supplied with each vial of conjugate. It provides product-specific details. Package inserts are also available on www.dako.com.

The products require no hazard labeling.

**References**

1. Krenik KD, Kephart GM, Offord KP, Dunette SL, Gleich GJ. Comparison of antifading agents used in immunofluorescence. J Immunol Methods 1989;117:91-7.
2. Valnes K, Brandtzaeg P. Retardation of immunofluorescence fading during microscopy. J Histochem Cytochem 1985;33:755-61.
3. Longin A, Souchier C, French M, Bryon P-A. Comparison of antifading agents used in fluorescence microscopy: image analysis and laser confocal microscopy study. J Histochem Cytochem 1993;41:1833-40.

# Indexes

# Alphabetical Index

This index lists all products available from Dako. More detailed information appears on the pages mentioned for each individual product.
For antibody clones, see pp 244-245.

**Abbreviations:**

| | |
|---|---|
| **a** | **Anti-** |
| **Gp** | **Guinea pig** |
| **Gt** | **Goat** |
| **Hu** | **Human** |
| **Mo** | **Mouse** |
| **Rb** | **Rabbit** |
| **Rt** | **Rat** |
| **Sw** | **Swine** |

**Labels:**

| | |
|---|---|
| **AP** | **Alkaline phosphatase** |
| **Biotin** | **Biotin with a 7-atom spacer arm** |
| **FITC** | **Fluorescein isothiocyanate** |
| **HRP** | **Horseradish peroxidase** |

| Code | Source | Product | See Page |
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| M0725 | Mo a | **Vimentin**, Clone V9 | 113 |
| GA630 | Mo a | **Vimentin**, Clone V9, Ready-to-Use, FLEX, for Dako Omnis | 32 113 |
| IR630 | Mo a | **Vimentin**, Clone V9, Ready-to-Use, FLEX, for Autostainer Link Instruments | 51 113 |
| IS630 | Mo a | **Vimentin**, Clone V9, Ready-to-Use, FLEX, for Dako Autostainer Instruments | 58 113 |
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# Synonym List

| Synonym | Name Used in Dako Product |
|---|---|
| 3-FL | CD15 |
| 3-fucosyl-N-acetyllactosamine | CD15 |
| 5HT | serotonin |
| 5-hydroxytryptamine | serotonin |
| 14-3-2 protein | neuron-specific enolase |
| 40S ribosomal protein S6 | ribosomal protein S6-pS240, phosphorylation site specific |
| 55 kDa actin-bundling protein | fascin |
| α-methylacyl-CoA racemase | AMACR |
| A b | beta-amyloid |
| A beta P | beta-amyloid |
| adhesion molecule-1 | CD31, endothelial cell |
| AFP | alpha-1-fetoprotein |
| ALK protein | CD246, ALK protein |
| alpha-methylacyl-coenzyme A racemase | AMACR |
| amyloid b-peptide | beta-amyloid |
| amyloid beta-protein | beta-amyloid |
| API4 | survivin |
| apoptosis inhibitor 4 | survivin |
| Arc-1 | E-cadherin |
| b-3 integrin | CD61, platelet glycoprotein IIIa |
| b3 integrin chain | CD61, platelet glycoprotein IIIa |
| B23 | nucleophosmin |
| bA4 protein | beta-amyloid |
| baculoviral IAP repeat-containing protein 5 | survivin |
| BIRC5 | survivin |
| BLAST-2 | CD23 |
| BSAP | B-cell-specific activator protein |
| C3b receptor | CD35 |
| C3bR | CD35 |
| C3d-receptor | CD21 |
| C4bR | CD35 |
| cadherin | E-cadherin and N-cadherin |
| calgranulin | myeloid/histiocyte antigen |
| CALLA | CD10 |
| calprotectin | myeloid/histiocyte antigen |
| caudal-type homeobox protein 2 | CDX2 |
| CD3 complex | CD3 |
| CD44s | CD44, phagocytic glycoprotein-1 |
| CD61A | CD61, platelet glycoprotein IIIa |
| CD87 | uPAR |
| CD236R | glycophorin C |
| CEA | carcinoembryonic antigen |
| cell-CAM 120/180 | E-cadherin |

| Synonym | Name Used in Dako Product |
|---|---|
| c-erbB-3 | HER3 |
| c-kit | CD117, c-kit |
| CMV | cytomegalovirus |
| COFS4 | ERCC1 |
| common acute lymphoblastic leukemia antigen | CD10 |
| complement receptor 1 | CD35 |
| complement receptor type 1 | CD35 |
| CR1 | CD35 |
| CR2 | CD21 |
| cyclooxygenase-2 | COX-2 |
| cystic fibrosis antigen | myeloid/histiocyte antigen |
| D2-40 | podoplanin |
| diaminobenzidine | DAB |
| EBV | Epstein-Barr virus |
| EBV-receptor | CD21 |
| EC 1.14.18.1 | tyrosinase |
| E-CD | E-cadherin |
| ECMRIII | CD44, phagocytic glycoprotein-1 |
| EGFR | epidermal growth factor receptor |
| EGFR pY1173 | EGFR-pY1197, phosphorylation site specific |
| EMA | epithelial membrane antigen |
| endoglin | CD105, endoglin |
| endothelial anticoagulant protein | thrombomodulin |
| endothelial cell | CD31, endothelial cell |
| EpCAM | epithelial-related antigen |
| epidermal growth factor receptor | EGFR |
| epidermal growth factor receptor 2 | c-erbB-2 oncoprotein, HercepTest, *HER2* FISH |
| epiligrin | laminin-5, gamma-2 chain |
| erbB-1 | epidermal growth factor receptor |
| ERBB2 | c-erbB-2 oncoprotein, HercepTest, *HER2* FISH |
| erbB-3 | HER3 |
| ets-related gene product | ERG |
| Ewing's sarcoma marker | CD99, MIC2 gene product, Ewing's sarcoma marker |
| excision repair cross-complementation group 1 | ERCC1 |
| factor VIII-related antigen | von Willebrand factor |
| FceRII | CD23 |
| fetomodulin | thrombomodulin |
| FM | thrombomodulin |
| FOLH | prostate-specific membrane antigen |
| follicular dendritic reticulum cell | follicular dendritic cell |
| FSP1 | S100A4 |

| Synonym | Name Used in Dako Product |
|---|---|
| g-enolase | neuron-specific enolase |
| GCDFP-15 | gross cystic disease fluid protein-15 |
| GCP2 | prostate-specific membrane antigen |
| glycophorin A | CD235a, glycophorin A |
| glycophorin b | glycophorin C |
| glycoprotein IIIa | CD61, platelet glycoprotein IIIa |
| glycoprotein P112 | thrombomodulin |
| GP160 | CD105, endoglin |
| gp200 | renal cell carcinoma marker |
| GPA | CD235a, glycophorin A |
| gpL115 | CD43 |
| GPIIb/IIIa | CD61, platelet glycoprotein IIIa |
| hairy cell leukaemia | leukaemia, hairy cell |
| H-CAM | CD44, phagocytic glycoprotein-1 |
| hCG | chorionic gonadotropin |
| hep par 1 | hepatocyte |
| HER1 protein | epidermal growth factor receptor |
| HER2 | c-erbB-2 oncoprotein, HercepTest, *HER2* FISH |
| HER2/neu | c-erbB-2 oncoprotein, HercepTest, *HER2* FISH |
| Hermes antigen | CD44, phagocytic glycoprotein-1 |
| hGH | growth hormone |
| HIV, p24 | human immunodeficiency virus |
| HNK-1 | CD57 |
| homing-associated cell adhesion molecule | CD44, phagocytic glycoprotein-1 |
| HPV | papillomavirus (human) |
| HSV | herpes simplex virus |
| ICSAT | MUM1 protein |
| Ig-a | CD79α |
| IGF2BP3 | IMP3 |
| immune adherence receptor | CD35 |
| insulin-like growth factor II mRNA binding protein 3 | IMP3 |
| interferon consensus sequence binding protein for activated T cells | MUM1 protein |
| interferon regulatory factor 4 | MUM1 protein |
| IRF4 protein | MUM1 protein |
| K8/18 | cytokeratin 8/18 |
| kalinin | laminin-5, gamma-2 chain |
| kallikrein 3 | prostate-specific antigen |
| K homology domain containing protein overexpressed in cancer | IMP3 |
| Ki-1 antigen | CD30 |

| Synonym | Name Used in Dako Product |
|---|---|
| KOC | IMP3 |
| L1 antigen | myeloid/histiocyte antigen |
| L26 | CD20cy |
| L523S Protein | IMP3 |
| lacto-N-fucopentaose III | CD15 |
| L-CAM | E-cadherin |
| leu-3 | CD4 |
| leucocyte function-associated antigen | CD2 |
| leucocyte sialoglycoprotein | CD43 |
| leukosialin | CD43 |
| LeuM3 | CD14 |
| Lewis X antigen | CD15 |
| LFA2 | CD2 |
| linker for activation of T cells | LAT protein |
| LNFP III | CD15 |
| low affinity IgE receptor | CD23 |
| LPS receptor | CD14 |
| LPS-R | CD14 |
| ly-5 | CD45, leucocyte common antigen |
| lymphatic endothelium marker | podoplanin |
| MAC | C5b-9 |
| MAM-1A5 | mammaglobin |
| MART-1 | melan-A |
| mb-1 | CD79α |
| membrane attack complex | C5b-9 |
| MGA | mammaglobin |
| MHC-I | HLA-ABC antigen |
| MHC-II | HLA-DP, DQ, DR antigen |
| MIC2 gene product | CD99, MIC2 gene product, Ewing's sarcoma marker |
| microphthalmia transcription factor | MITF |
| MMAC | PTEN |
| MO2 | CD14 |
| MPO | myeloperoxidase |
| MRP8/MRP14 | myeloid/histiocyte antigen |
| MSH2 | mutS protein homolog 2 |
| MSH6 | mutS protein homolog 6 |
| MUC1 | epithelial membrane antigen |
| mucin 2 | MUC2 |
| mucin 5AC | MUC5AC |
| muramidase | lysozyme EC 3.2.1.17 |
| mutated in multiple advanced cancers | PTEN |
| My4 | CD14 |
| NCAD | N-cadherin |

# Synonym List (continued)

| Synonym | Name Used in Dako Product |
|---|---|
| neprilysin | CD10 |
| nerve cadherin | N-cadherin |
| neu oncoprotein | c-erbB-2 oncoprotein, HercepTest, *HER2* FISH |
| neural-type cadherin | N-cadherin |
| neutral endopeptidase 24.11 | CD10 |
| nicein | laminin-5, gamma-2 chain |
| NO38 | nucleophosmin |
| NPM | nucleophosmin |
| NSE | neuron-specific enolase |
| OKT4 | CD4 |
| oncoprotein, BCL2 | BCL2 oncoprotein |
| OTF 3/4 | octamer-binding transcription factor 3/4 |
| p30/32mic2 | CD99, MIC2 gene product, Ewing's sarcoma marker |
| p38 | synaptophysin |
| p55 | fascin |
| p145 | CD117, c-kit |
| p185HER2 | c-erbB-2 oncoprotein, HercepTest, *HER2* FISH |
| P501S | prostein |
| P504S | AMACR |
| Pax-5 | B-cell-specific activator protein |
| PCNA | proliferating cell nuclear antigen |
| PECAM-1 | CD31, endothelial cell |
| Pgp-1 | CD44, phagocytic glycoprotein-1 |
| phagocytic glycoprotein-1 | CD44, phagocytic glycoprotein-1 |
| PIP | MUM1 protein |
| PIP | gross cystic disease fluid protein-15 |
| PKB | Akt-pS473 |
| platelet/endothelial cell adhesion molecule-1 | CD31, endothelial cell |
| platelet glycoprotein IIIa | CD61, platelet glycoprotein IIIa |
| PMS2 | postmeiotic segregation increased 2 |
| POU5F1 | octamer-binding transcription factor 3/4 |
| prolactin-inducible protein | gross cystic disease fluid protein-15 |
| protein IT | cytokeratin 20 |
| protein kinase B | Akt-pS473 |
| protein p38 | synaptophysin |
| PSA | prostate-specific antigen |
| PSAP | prostatic acid phosphatase |
| PSM | prostate-specific membrane antigen |
| PSMA | prostate-specific membrane antigen |
| ptyr-1173 EGFR | EGFR-pY1197, phosphorylation site specific |

| Synonym | Name Used in Dako Product |
|---|---|
| PU.1 interaction partner | MUM1 protein |
| RPS6 | ribosomal protein S6-pS240, phosphorylation site specific |
| Rac-α | Akt-pS473 |
| RCC | renal cell carcinoma marker |
| S100A8/S100A9 | myeloid/histiocyte antigen |
| sialoglycoprotein alpha | CD235a, glycophorin A |
| sialophorin | CD43 |
| sialyl Lea | CA 19-9 |
| somatotropin | growth hormone |
| SSEA-1 | CD15 |
| stage-specific embryonic antigen-1 | CD15 |
| syndecan-1 | CD138 |
| syp1 | synaptophysin |
| T1 | CD5 |
| T3 | CD3 |
| T11 antigen | CD2 |
| T200 | CD45, leucocyte common antigen |
| T311 | tyrosinase |
| TCC | C5b-9 |
| TdT | terminal deoxynucleotidyl transferase |
| TEP1 | PTEN |
| terminal complement complex | C5b-9 |
| Tg | thyroglobulin |
| TGF-b-regulated and epithelial cell-enriched phosphatase | PTEN |
| TIMP-1 | tissue inhibitor of metalloproteinase 1 |
| Tp50 | CD2 |
| Tp67 | CD5 |
| TPO | thyroid peroxidase |
| transcriptional regulator ERG | ERG |
| tryptase | mast cell tryptase |
| TS | thymidylate synthase |
| TTF-1 | thyroid transcription factor |
| tumor protein 63 | p63 protein |
| urokinase-type plasminogen activator receptor | uPAR |
| UV20 | ERCC1 |
| uvomorulin | E-cadherin |
| vascular permeability factor | vascular endothelial growth factor |
| VEGF | vascular endothelial growth factor |
| VPF | vascular endothelial growth factor |
| X-hapten | CD15 |
| Z-associated protein, 70 kDa | ZAP-70 |

# Antibody Clone Index

The following list of antibodies has been cataloged alphabetically by clone name.

| Clone | Antibody | Code | Page |
|---|---|---|---|
| 0042 | Thyroid-Stimulating Hormone (TSH) | M3503 | 112 |
| 02A3 | Adrenocorticotropin (ACTH) | M3501 | 73 |
| 1A4 | Smooth Muscle Actin | M0851 | 73 |
| 1D2 C3 | Villin | M3637 | 113 |
| 1F8 | CD21, B Cell | M0784 | 80 |
| 2B11 + PD7/26 | CD45, Leucocyte Common Antigen | M0701 | 82 |
| 2F3.2 | ZAP-70 | M7303 | 114 |
| 2F11 | Neurofilament Protein | M0762 | 104 |
| 3E6 | Prostate-Specific Membrane Antigen (PSMA) | M3620 | 109 |
| 4B12 | CD4 | M7310 | 78 |
| 4C7 | CD5 | M3641 | 78 |
| 4C7 | Laminin | M0638 | 99 |
| 4F9 | ERCC1 | M3648 | 92 |
| 4G1 | Laminin-5, Gamma-2 Chain | M7262 | 99 |
| 4KB5 | CD45RA | M0754 | 83 |
| 5.8A | MyoD1 | M3512 | 103 |
| 5-D8/1 | Enterovirus | M7064 | 91 |
| 5HT-H209 | Serotonin | M0758 | 110 |
| 6F2 | Glial Fibrillary Acidic Protein (GFAP) | M0761 | 94 |
| 6F/3D | Beta-Amyloid | M0872 | 75 |
| 6F-H2 | Wilms' Tumor 1 (WT1) Protein | M3561 | 114 |
| 6G11 | N-Cadherin | M3613 | 104 |
| 6H2.1 | PTEN | M3627 | 109 |
| 8A9 | Placental Alkaline Phosphatase | M7191 | 107 |
| 8G7G3/1 | Thyroid Transcription Factor | M3575 | 112 |
| 10E3 | Prostein | M3615 | 109 |
| 12C4 | Survivin | M3624 | 110 |
| 12E7 | CD99, MIC2 Gene Products, Ewing's Sarcoma Marker | M3601 | 84 |
| 13H4 | AMACR | M3616 | 74 |
| 14-5 | Akt-pS473, Phosphorylation Site Specific | M3628 | 73 |
| 23A3 | Gross Cystic Disease Fluid Protein-15 | M3638 | 95 |
| 34βE12 | Cytokeratin, High MW | M0630 | 90 |
| 55K-2 | Fascin | M3567 | 93 |
| 56C6 | CD10 | M7308 | 79 |
| 69.1 | IMP3 | M3626 | 97 |
| 101 | MCM3 Protein | M7263 | 100 |
| 1116-NS-19-9 | CA 19-9 | M3517 | 76 |
| 123C3 | CD56 | M7304 | 83 |
| 124 | BCL2 Oncoprotein | M0887 | 74 |
| 151 | BCL10 Protein | M7260 | 75 |
| 304-1A5 | Mammaglobin | M3625 | 100 |
| 318-6-11 | p53 Protein | M3629 | 106 |
| 376 | Nucleophosmin | M7305 | 105 |
| 1009 | Thrombomodulin | M0617 | 111 |
| A103 | Melan-A | M7196 | 100 |
| AA1 | Mast Cell Tryptase | M7052 | 100 |
| AB75 | CD2 | M7309 | 78 |
| AE1/AE3 | Cytokeratin | M3515 | 87 |

| Clone | Antibody | Code | Page |
|---|---|---|---|
| ALK1 | CD246, ALK Protein | M7195 | 86 |
| Alpha-Sr-1 | Actin (Sarcomeric) | M0874 | 73 |
| AR441 | Androgen Receptor | M3562 | 74 |
| β-Catenin-1 | Beta-Catenin | M3539 | 75 |
| BBS/NC/VI-H14 | Neuron-Specific Enolase (NSE) | M0873 | 104 |
| Ber-EP4 | Epithelial Antigen | M0804 | 91 |
| Ber-H2 | CD30 | M0751 | 81 |
| Ber-MAC-DRC | CD35 | M0846 | 82 |
| Bu20a | Bromodeoxyuridine | M0744 | 75 |
| C8/144B | CD8 | M7103 | 79 |
| C10 | Follicle-Stimulating Hormone (FSH) | M3504 | 93 |
| C93 | Luteinizing Hormone (LH) | M3502 | 99 |
| CALP | Calponin | M3556 | 77 |
| Carb-3 | CD15 | M3631 | 80 |
| CBC.37 | CD7 | M7255 | 79 |
| CCH2 + DDG9 | Cytomegalovirus | M0854 | 90 |
| CCP58 | MUC2 | M7313 | 101 |
| CIV 22 | Collagen IV | M0785 | 87 |
| CLH1 | MUC5AC | M7316 | 102 |
| CNA.42 | Follicular Dendritic Cell | M7157 | 94 |
| CR3/43 | HLA-DP, DQ, DR Antigen | M0775 | 96 |
| CS.1-4 | Epstein-Barr Virus, LMP | M0897 | 92 |
| CX-294 | COX-2 | M3617 | 87 |
| D2-40 | Podoplanin | M3619 | 107 |
| D5 | MITF | M3621 | 101 |
| D5/16 B4 | Cytokeratin 5/6 | M7237 | 88 |
| D33 | Desmin | M0760 | 90 |
| DAK-A3 | Chromogranin A | M0869 | 86 |
| DAK-Calret 1 | Calretinin | M7245 | 77 |
| DAK-CD23 | CD23 | M7312 | 81 |
| DAK-CDX2 | CDX2 | M3636 | 86 |
| DAK-H1-1197 | EGFR-pY1197 | M7299 | 91 |
| DAK-H1-WT | EGFR, Wild-Type | M7298 | 91 |
| DAK-H3-IC | HER3 | M7292 | 93 |
| DAK-Pax5 | B-Cell-Specific Activator Protein | M7307 | 74 |
| DAK-S6-240 | Ribosomal Protein S6-pS240, Phosphorylation Site Specific | M7300 | 110 |
| DAK-SYNAP | Synaptophysin | M7315 | 110 |
| DAK-Tg6 | Thyroglobulin | M0781 | 111 |
| DBA.44 | Leukaemia, Hairy Cell | M0880 | 99 |
| DC 10 | Cytokeratin 18 | M7010 | 89 |
| DDG9 + CCH2 | Cytomegalovirus | M0854 | 90 |
| DE-K10 | Cytokeratin 10 | M7002 | 88 |
| DE-K13 | Cytokeratin 10/13 | M7003 | 88 |
| DF1485 | CD44, Phagocytic Glycoprotein-1 | M7082 | 82 |
| DF-T1 | CD43 | M0786 | 82 |
| DO-7 | p53 Protein | M7001 | 106 |
| E3 | Cytokeratin 17 | M7046 | 89 |
| E9 | Metallothionein | M0639 | 101 |
| E29 | Epithelial Membrane Antigen (EMA) | M0613 | 92 |
| EBM11 | CD68 | M0718 | 84 |

# Antibody Clone Index (continued)

| Clone | Antibody | Code | Page |
|---|---|---|---|
| EP12 | Cyclin D1 | M3642 | 87 |
| EP17/EP30 | Cytokeratin 8/18 | M3652 | 88 |
| EP49 | MutS Protein Homolog 6 | M3646 | 103 |
| EP51 | Postmeiotic Segregation Increased 2 | M3647 | 107 |
| EP111 | ERG | M7314 | 92 |
| EP266 | Terminal Deoxynucleotidyl Transferase | M3651 | 111 |
| ER-PR8 | Prostate-Specific Antigen (PSA) | M0750 | 108 |
| ES05 | MutL Protein Homolog 1 | M3640 | 102 |
| F5D | Myogenin | M3559 | 104 |
| F7.2.38 | CD3 | M7254 | 78 |
| F8/86 | Von Willebrand Factor | M0616 | 114 |
| FE11 | MutS Protein Homolog 2 | M3639 | 102 |
| GrB-7 | Granzyme B | M7235 | 94 |
| H11 | Epidermal Growth Factor Receptor | M3563 | 91 |
| HBME-1 | Mesothelial Cell | M3505 | 101 |
| h-CD | Caldesmon | M3557 | 76 |
| HHF35 | Muscle Actin | M0635 | 73 |
| HMB-45 | Melanosome | M0634 | 101 |
| II-7 | Carcinoembryonic Antigen | M7072 | 77 |
| JC70A | CD31, Endothelial Cell | M0823 | 81 |
| JC159 | CD235a, Glycophorin A | M0819 | 85 |
| JCB117 | CD79α, | M7050 | 84 |
| K1H8 | Papillomavirus (HPV) | M3528 | 106 |
| Kal-1 | Human Immunodeficiency Virus (HIV), p24 | M0857 | 96 |
| Ki-S1 | Topoisomerase IIα | M7186 | 112 |
| KP1 | CD68 | M0814 | 84 |
| $K_s$20.8 | Cytokeratin 20 | M7019 | 89 |
| L26 | CD20cy | M0755 | 80 |
| LAT-1 | LAT Protein | M7279 | 99 |
| LE-CD19 | CD19 | M7296 | 80 |
| M11 | CA 125 | M3520 | 76 |
| MAC 387 | Myeloid/Histiocyte Antigen | M0747 | 103 |
| MI15 | CD138 | M7228 | 85 |
| MIB-1 | Ki-67 Antigen | M7240 | 98 |
| MIB-5 | Rat Ki-67 Antigen | M7248 | 98 |
| MNF116 | Cytokeratin | M0821 | 87 |
| MoAb47 | Thyroid Peroxidase | M7257 | 112 |
| MOC-31 | Epithelial-Related Antigen | M3525 | 92 |
| MR12/53 | Rabbit Immunoglobulins | M0737 | 120 |
| MUM1p | MUM1 Protein | M7259 | 102 |
| N1NK | Octamer-Binding Transcription Factor 3/4 | M3649 | 105 |
| NCH-38 | E-Cadherin | M3612 | 90 |
| NP57 | Neutrophil Elastase | M0752 | 105 |
| 010 | CD1a | M3571 | 77 |
| OCH1E5 | Hepatocyte | M7158 | 95 |
| OV-TL 12/30 | Cytokeratin 7 | M7018 | 88 |
| PASE/4LJ | Prostatic Acid Phosphatase | M0792 | 109 |

| Clone | Antibody | Code | Page |
|---|---|---|---|
| PC10 | Proliferating Cell Nuclear Antigen | M0879 | 108 |
| PD7/26 + 2B11 | CD45, Leucocyte Common Antigen | M0701 | 82 |
| PG-B6p | BCL6 Protein | M7211 | 75 |
| PG-M1 | CD68 | M0876 | 84 |
| PgR 636 | Progesterone Receptor | M3569 | 108 |
| PgR 1294 | Progesterone Receptor | M3568 | 108 |
| PPG5/10 | Estrogen Receptor β1 | M7292 | 93 |
| QBEnd 10 | CD34 Class II | M7165 | 82 |
| R1 | Inhibin α | M3609 | 97 |
| R4 | uPAR | M7294 | 113 |
| RAM11 | Macrophage | M0633 | 100 |
| RCK108 | Cytokeratin 19 | M0888 | 89 |
| Ret40f | Glycophorin C | M0820 | 94 |
| SMMS-1 | Smooth Muscle Myosin Heavy Chain | M3558 | 104 |
| SN6h | CD105, Endoglin | M3527 | 85 |
| SPM314 | Renal Cell Carcinoma Marker | M3632 | 109 |
| SX53G8 | $p27^{Kip1}$ | M7203 | 106 |
| SX118 | $p21^{WAF1/Cip1}$ | M7202 | 106 |
| T311 | Tyrosinase | M3623 | 112 |
| TAL.1B5 | HLA-DR Antigen, Alpha-Chain | M0746 | 96 |
| TB01 | CD57 | M7271 | 83 |
| TS106 | Thymidylate Synthase | M3614 | 111 |
| TÜK4 | CD14 | M0825 | 79 |
| UCHL1 | CD45R0 | M0742 | 83 |
| V9 | Vimentin | M0725 | 113 |
| VG1 | Vascular Endothelial Growth Factor (VEGF) | M7273 | 113 |
| Vim 3B4 | Vimentin | M7020 | 114 |
| VS38c | Plasma Cell | M7077 | 107 |
| VT7 | Tissue Inhibitor of Metalloproteinases 1 | M7293 | 112 |
| W6/32 | HLA-ABC Antigen | M0736 | 95 |
| Y2/51 | CD61, Platelet Glycoprotein IIIa | M0753 | 83 |

# Product Code System

To clarify the product coding system, we have included the following brief explanation of the lettering system used with the product code numbers. This is a general guide; there may be some exceptions.

| | |
|---|---|
| **A** | Polyclonal antibodies to human antigens |
| **AR** | Artisan Link and reagents |
| **AS** | Autostainer Link |
| **B** | Polyclonal antibodies to viral and microbial antigens |
| **C** | Glycergel Mounting Medium |
| **CR** | Coverslipper instrument and accessories |
| **CS** | CoverStainer instrument and accessories |
| **D** | Alkaline phosphatase (AP)-conjugated products |
| **DL** | Labeling System |
| **E** | Biotinylated products |
| **F** | Fluorescein (FITC)-conjugated antibodies |
| **G** | SureFISH probes and related reagents |
| **GA** | FLEX ready-to-use antibodies for Dako Omnis |
| **GC** | Ancillaries and Accessories for Dako Omnis |
| **GI** | Dako Omnis |
| **GM** | IQISH probes and reagents for Dako Omnis |
| **GV** | Kits for Dako Omnis |
| **IC** | Antibody Cocktails for Autostainer Link instruments |
| **IR** | FLEX ready-to-use antibodies for Autostainer Link instruments |
| **IS** | FLEX ready-to-use antibodies for Dako Autostainer instruments |
| **K** | Kit systems |
| **M** | Monoclonal antibodies |
| **P** | Horseradish peroxidase (HRP)-conjugated products |
| **PT** | PT Link instrument and accessories |
| **S** | Equipment and ancillary products |
| **SK** | Kits and accessories for Autostainer Link instruments |
| **SL** | Non-immunologic reagent for use with the Dako Autostainer |
| **X** | Control reagents<br>Normal animal sera and normal animal immunoglobulin fractions |
| **Y** | Molecular probes |
| **Z** | Antibodies to animal antigens |

# Product Code Index

# Product Code Index (continued)

| Code | Product | Package Size | Order No. | Page |
|---|---|---|---|---|
| **AR180** | Artisan Jones' Basement Membrane (PAS-M) Stain Kit | 100 tests | AR18011 | 196 |
| **AR181** | Artisan Warthin-Starry Stain Kit | 50 tests<br>100 tests | AR18192<br>AR18111 | 197 |
| **AR182** | Artisan Recticulin/No Counterstain Stain Kit | 100 tests | AR18211 | 197 |
| **AR306** | Artisan Gram Yellow Stain Kit | 50 tests | AR30692 | 192 |
| **AR307** | Artisan Colloidal Iron Stain Kit | 50 tests | AR30792 | 192 |
| **AR308** | Artisan Jenner-Wright Giemsa Stain Kit | 50 tests | AR30892 | 192 |
| **AR309** | Artisan Clearing Solution | 5 x 100 tests | AR30911 | 191 |
| **AR310** | Artisan Link Pro Special Staining System | 1 unit | AR31030 | 189 |
| **AR313** | Artisan Orcein Stain Kit | 50 tests | AR31392 | 193 |
| **AR314** | Artisan Maintenance Kit | 33 tests | AR31411 | 191 |
| **AR362** | Artisan Acid-Fast Bacteria (AFB) Light Green Stain Kit | 50 tests | AR36292 | 192 |
| **AR376** | Artisan Grocott's Methenamine Silver Eosin Stain Kit | 50 tests | AR37692 | 193 |
| **AR380** | Artisan Jones' Basement Membrane Light Green (PAS-M) Stain Kit | 50 tests | AR38092 | 193 |
| **AR409** | Artisan 14 Pack Reagent Holder | 1 unit | AR40930 | 191 |
| **AR480** | Artisan Jones' Basement Membrane H&E (PAS-M) Stain Kit | 100 tests | AR48011 | 193 |
| **AS480** | Autostainer Link 48 | 1 unit | AS48030 | 35 |
| **B** | | | | |
| **B0114** | Polyclonal Rabbit Anti-Herpes Simplex Virus Type 1 | 2 mL | B011402 | 95 |
| **B0116** | Polyclonal Rabbit Anti-Herpes Simplex Virus Type 2 | 2 mL | B011602 | 95 |
| **B0357** | Polyclonal Rabbit Anti-Escherichia Coli | 2 mL | B035702 | 117 |
| **B0471** | Polyclonal Rabbit Anti-Helicobacter Pylori | 0.2 mL<br>1 mL | B047129<br>B047101 | 95 |
| **B0586** | Polyclonal Rabbit Anti-Hepatitis B Virus Core Antigen | 1 mL | B058601 | 95 |
| **C** | | | | |
| **C0563** | Glycergel®, Aqueous Mounting Medium | 15 mL | C056330 | 135 |
| **CR100** | Dako Coverslipper | 1 unit | CR10030 | 184 |
| **CR121** | Cover Glass, 24 mm x 60 mm | 5 x 200 pcs | CR12130 | 185 |
| **CR122** | Cover Glass, 24 mm x 55 mm | 5 x 200 pcs | CR12230 | 185 |
| **CR124** | Cover Glass, 24 mm x 40 mm | 5 x 200 pcs | CR12430 | 185 |
| **CS100** | Dako CoverStainer | 1 unit | CS10030 | 183 |
| **CS119** | Dako CoverStainer Slide Rack | 10 racks | CS11930 | 185 |
| **CS700** | Dako Hematoxylin | Up to 3000 tests, 1 L | CS70030 | 185 |
| **CS701** | Dako Eosin | Up to 3000 tests, 1 L | CS70130 | 185 |
| **CS702** | Dako Bluing Buffer | Up to 3000 tests, 1 L | CS70230 | 185 |
| **CS703** | Dako Mounting Medium | 473 mL | CS70330 | 185 |
| **CS704** | Dako Cover Glass, 24 x 50 mm | 5 x 200 pcs | CS70430 | 185 |
| **CS705** | Dako Toluene-Free Mounting Medium | 500 mL | CS70530 | 185 |
| **D** | | | | |
| **D0306** | Polyclonal Swine Anti-Rabbit Immunoglobulins/AP | 1 mL | D030601 | 120 |
| **D0314** | Polyclonal Rabbit Anti-Mouse Immunoglobulins/AP | 2 mL | D031402 | 119 |
| **D0336** | Polyclonal Rabbit Anti-Human IgG/AP | 1 mL | D033601 | 96 117 |
| **D0486** | Polyclonal Goat Anti-Mouse Immunoglobulins/AP | 2 mL | D048602 | 119 |
| **D0487** | Polyclonal Goat Anti-Rabbit Immunoglobulins/AP | 1 mL | D048701 | 119 |
| **DL213** | Slide Label Kit, Small Flap | 1500 labels | DL21330 | 137 |
| **DL412** | Universal Label Printer (Link) | 1 unit | DL41230 | 136 |
| **E** | | | | |
| **E0353** | Polyclonal Swine Anti-Rabbit Immunoglobulins/Biotinylated | 1 mL | E035301 | 120 |
| **E0354** | Polyclonal Rabbit Anti-Mouse Immunoglobulins/Biotinylated | 1 mL | E035401 | 119 |
| **E0413** | Polyclonal Rabbit Anti-Mouse Immunoglobulins/Biotinylated, Rabbit $F(ab')_2$ | 1 mL | E041301 | 119 |

# Product Code Index (continued)

| Code | Product | Package Size | Order No. | Page |
|---|---|---|---|---|
| **E0431** | Polyclonal Swine Anti-Rabbit Immunoglobulins/Biotinylated, Swine $F(ab')_2$ | 1 mL | E043101 | 120 |
| **E0432** | Polyclonal Goat Anti-Rabbit Immunoglobulins/Biotinylated | 1 mL | E043201 | 119 |
| **E0433** | Polyclonal Goat Anti-Mouse Immunoglobulins/Biotinylated | 1 mL | E043301 | 119 |
| **E0466** | Polyclonal Rabbit Anti-Goat Immunoglobulins/Biotinylated | 1 mL | E046601 | 119 |
| **F** | | | | |
| **F0111** | Polyclonal Rabbit Anti-Human Fibrinogen/FITC | 2 mL | F011102 | 93 117 |
| **F0117** | Polyclonal Rabbit Anti-Human Albumin/FITC | 2 mL | F011702 | 73 |
| **F0169** | Polyclonal Rabbit Anti-Human C4c Complement/FITC | 2 mL | F016902 | 75 |
| **F0198** | Polyclonal Rabbit Anti-Human Kappa Light Chains/FITC | 2 mL | F019802 | 98 117 |
| **F0199** | Polyclonal Rabbit Anti-Human Lambda Light Chains/FITC | 2 mL | F019902 | 98 118 |
| **F0200** | Polyclonal Rabbit Anti-Human IgA, IgG, IgM, Kappa, Lambda/FITC | 2 mL | F020002 | 96 117 |
| **F0201** | Polyclonal Rabbit Anti-Human C3c Complement/FITC | 2 mL | F020102 | 75 |
| **F0202** | Polyclonal Rabbit Anti-Human IgG/FITC | 2 mL | F020202 | 96 117 |
| **F0203** | Polyclonal Rabbit Anti-Human IgM/FITC | 2 mL | F020302 | 97 117 |
| **F0204** | Polyclonal Rabbit Anti-Human IgA/FITC | 2 mL | F020402 | 96 117 |
| **F0205** | Polyclonal Swine Anti-Rabbit Immunoglobulins/FITC | 2 mL | F020502 | 120 |
| **F0232** | Polyclonal Rabbit Anti-Mouse Immunoglobulins/FITC | 2 mL | F023202 | 119 |
| **F0250** | Polyclonal Rabbit Anti-Goat Immunoglobulins/FITC | 2 mL | F025002 | 119 |
| **F0254** | Polyclonal Rabbit Anti-Human C1q Complement/FITC | 2 mL | F025402 | 75 |
| **F0261** | Polyclonal Rabbit Anti-Mouse Immunoglobulins/FITC | 2 mL | F026102 | 119 |
| **F0315** | Polyclonal Rabbit Anti-Human IgG/FITC, Rabbit $F(ab')_2$ | 1 mL | F031501 | 96 117 |
| **F0316** | Polyclonal Rabbit Anti-Human IgA/FITC, Rabbit $F(ab')_2$ | 1 mL | F031601 | 96 |
| **G** | | | | |
| **G111200** | SureFISH ALK BA P5 | 5 µL | G111200 | 175 |
| **G111201** | SureFISH ROS1 BA P5 | 5 µL | G111201 | 175 |
| **G111202** | SureFISH RET BA P5 | 5 µL | G111202 | 175 |
| **G111400** | SureFISH ALK BA P20 | 20 µL | G111400 | 175 |
| **G111401** | SureFISH ROS1 BA P20 | 20 µL | G111401 | 175 |
| **G111402** | SureFISH RET BA P20 | 20 µL | G111402 | 175 |
| **G111900** | SureFISH ALK BA P200 | 200 µL, | G111900 | 175 |
| **G111901** | SureFISH ROS1 BA P200 | 200 µL | G111901 | 175 |
| **G111902** | SureFISH RET BA P200 | 200 µL | G111902 | 175 |
| **G211400** | SureFISH ALK BA P20x6 | 20 µL, 6 vials | G211400 | 175 |
| **G211401** | SureFISH ROS1 BA P20x6 | 20 µL, 6 vials | G211401 | 175 |
| **G211402** | SureFISH RET BA P20 x 6 | 20 µL, 6 vials | G211402 | 175 |
| **G9414A** | IQFISH Fast Hybridization Buffer 9000 | 900 µL | G9414A | 180 |
| **G9415A** | IQFISH Fast Hybridization Buffer 200 | 200 µL | G9415A | 180 |
| **G9416A** | IQFISH Fast Hybridization Buffer 200x6 | 200 µL, 6 vials | G9416A | 180 |
| **GA051** | FLEX Monoclonal Mouse Anti-Human Cytokeratin, High Molecular Weight, Clone 34βE12, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA05161 | 29 90 |
| **GA052** | FLEX Monoclonal Mouse Anti-Human Melanosome, Clone HMB-45, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA05261 | 31 101 |
| **GA053** | FLEX Monoclonal Mouse Anti-Human Cytokeratin, Clone AE1/AE3, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA05361 | 29 87 |
| **GA054** | FLEX Monoclonal Mouse Anti-Human Caldesmon, Clone h-CD, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA05461 | 26 76 |
| **GA059** | FLEX Monoclonal Mouse Anti-Human E-Cadherin, Clone NCH-38, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA05961 | 29 90 |
| **GA060** | FLEX Monoclonal Rabbit Anti-Human AMACR, Clone 13H4, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA06061 | 26 74 |
| **GA062** | FLEX Monoclonal Mouse Anti-Human CD15, Clone Carb-3, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA06261 | 27 80 |
| **GA074** | FLEX Monoclonal Mouse Anti-Human Mammaglobin, Clone 304-1A5, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA07461 | 30 100 |
| **GA075** | FLEX Monoclonal Mouse Anti-Human Renal Cell Carcinoma Marker, Clone SPM314, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA07561 | 31 109 |
| **GA077** | FLEX Monoclonal Mouse Anti-Human Gross Cystic Disease Fluid Protein-15, Clone 23A3, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA07761 | 30 95 |

◆ Packaged in vials for use with Dako Omnis

# Product Code Index (continued)

| Code | Product | Package Size | Order No. | Page |
|---|---|---|---|---|
| **GA080** | FLEX Monoclonal Mouse Anti-Human CDX2, Clone DAK-CDX2, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA08061 | 28 86 |
| **GA083** | FLEX Monoclonal Rabbit Anti-Human Cyclin D1, Clone EP12, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA08361 | 28 87 |
| **GA500** | FLEX Polyclonal Rabbit Anti-Human Alpha-1-Fetoprotein, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA50061 | 26 73 |
| **GA503** | FLEX Polyclonal Rabbit Anti-Human CD3, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA50361 | 27 78 |
| **GA504** | FLEX Polyclonal Rabbit Anti-S100, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA50461 | 31 110 |
| **GA506** | FLEX Polyclonal Rabbit Anti-Human Kappa Light Chains, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA50661 | 30 98 |
| **GA507** | FLEX Polyclonal Rabbit Anti-Human Lambda Light Chains, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA50761 | 30 98 |
| **GA508** | FLEX Polyclonal Rabbit Anti-Human Chorionic Gonadotropin, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA50861 | 28 86 |
| **GA509** | FLEX Polyclonal Rabbit Anti-Human Thyroglobulin, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA50961 | 31 111 |
| **GA510** | FLEX Polyclonal Rabbit Anti-Human IgA, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA51061 | 30 96 |
| **GA511** | FLEX Polyclonal Rabbit Anti-Human Myeloperoxidase, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA51161 | 31 103 |
| **GA514** | FLEX Polyclonal Rabbit Anti-Human Prostate-Specific Antigen, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA51461 | 31 108 |
| **GA515** | FLEX Polyclonal Rabbit Anti-Human Calcitonin, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA51561 | 26 76 |
| **GA519** | FLEX Polyclonal Rabbit Anti-Human Gastrin, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA51961 | 30 94 |
| **GA524** | FLEX Polyclonal Rabbit Anti-Glial Fibrillary Acidic Protein, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA52461 | 30 94 |
| **GA526** | FLEX Polyclonal Rabbit Anti-Human Carcinoembryonic Antigen, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA52661 | 26 77 |
| **GA527** | FLEX Polyclonal Rabbit Anti-Human Von Willebrand Factor, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA52761 | 32 114 |
| **GA600** | FLEX Universal Negative Control, Rabbit, Ready-to-Use (Dako Omnis) | 120 tests, 24 mL◆ | GA60066 | 32 121 |
| **GA604** | FLEX Monoclonal Mouse Anti-Human CD20cy, Clone L26, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA60461 | 27 80 |
| **GA607** | FLEX Monoclonal Mouse Anti-Human Neurofilament Protein, Clone 2F11, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA60761 | 31 104 |
| **GA609** | FLEX Monoclonal Mouse Anti-Human CD68, Clone KP1, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA60961 | 28 84 |
| **GA610** | FLEX Monoclonal Mouse Anti-Human CD31, Endothelial Cell, Clone JC70A, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA61061 | 27 81 |
| **GA613** | FLEX Monoclonal Mouse Anti-Human CD68, Clone PG-M1, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA61361 | 28 84 |
| **GA615** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 19, Clone RCK108, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA61561 | 29 89 |
| **GA616** | FLEX Monoclonal Mouse Anti-Human p53 Protein, Clone DO-7, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA61661 | 31 106 |
| **GA618** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 18, Clone DC 10, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA61861 | 29 89 |
| **GA619** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 7, Clone OV-TL 12/30, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA61961 | 29 88 |
| **GA621** | FLEX Monoclonal Mouse Anti-Human CD79α, Clone JCB117, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA62161 | 28 84 |
| **GA622** | FLEX Monoclonal Mouse Anti-Human Carcinoembryonic Antigen, Clone II-7, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA62261 | 26 77 |
| **GA623** | FLEX Monoclonal Mouse Anti-Human CD8, Clone C8/144B, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA62361 | 27 79 |
| **GA624** | FLEX Monoclonal Mouse Anti-Human Hepatocyte, Clone OCH1E5, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA62461 | 30 95 |
| **GA625** | FLEX Monoclonal Mouse Anti-Human BCL6 Protein, Clone PG-B6p, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA62561 | 26 75 |
| **GA626** | FLEX Monoclonal Mouse Anti-Human Ki-67 Antigen, Clone MIB-1, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA62661 | 30 98 |
| **GA630** | FLEX Monoclonal Mouse Anti-Vimentin, Clone V9, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA63061 | 32 113 |
| **GA632** | FLEX Monoclonal Mouse Anti-Human CD34 Class II, Clone QBEnd 10, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA63261 | 27 82 |
| **GA636** | FLEX Monoclonal Mouse Anti-Human CD43, Clone DF-T1, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA63661 | 28 82 |
| **GA637** | FLEX Monoclonal Mouse Anti-Human Epithelial Antigen, Clone Ber-EP4, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA63761 | 29 91 |
| **GA641** | FLEX Monoclonal Mouse Anti-Human CD246, ALK Protein, Clone ALK1, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA64161 | 28 86 |
| **GA642** | FLEX Monoclonal Mouse Anti-Human CD138, Clone MI15, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA64261 | 28 85 |
| **GA643** | FLEX Monoclonal Mouse Anti-Human CD7, Clone CBC.37, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA64361 | 27 79 |
| **GA644** | FLEX Monoclonal Mouse Anti-Human MUM1 Protein, Clone MUM1p, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA64461 | 31 102 |
| **GA648** | FLEX Monoclonal Mouse Anti-Human CD10, Clone 56C6, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA64861 | 27 79 |
| **GA650** | FLEX Monoclonal Mouse Anti-Human B-Cell-Specific Activator Protein, Clone DAK-Pax5, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA65061 | 26 74 |
| **GA651** | FLEX Monoclonal Mouse Anti-Human CD2, Clone AB75, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA65161 | 27 78 |
| **GA652** | FLEX Monoclonal Mouse Anti-Human Nucleophosmin, Clone 376, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA65261 | 31 105 |
| **GA659** | FLEX Monoclonal Rabbit Anti-Human ERG, Clone EP111, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA65961 | 29 92 |

◆ Packaged in vials for use with Dako Omnis

# Product Code Index (continued)

| Code | Product | Package Size | Order No. | Page |
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| **GA701** | FLEX Monoclonal Mouse Anti-Human CA 125, Clone M11, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA70161 | 26 76 |
| **GA702** | FLEX Monoclonal Mouse Anti-Human Beta-Catenin, Clone β-Catenin-1, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA70261 | 26 75 |
| **GA750** | FLEX Universal Negative Control, Mouse, Ready-to-Use (Dako Omnis) | 120 tests, 24 mL◆ | GA75066 | 32 121 |
| **GA751** | FLEX Monoclonal Mouse Anti-Human CD45, Leucocyte Common Antigen, Clones 2B11 + PD7/26, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA75161 | 28 82 |
| **GA777** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 20, Clone $K_s$20.8, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA77761 | 29 89 |
| **GA780** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 5/6, Clone D5/16 B4, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA78061 | 29 88 |
| **GA781** | FLEX Monoclonal Mouse Anti-Human CD23, Clone DAK-CD23, Ready-to-Use (Dako Omnis) | 60 tests, 12 mL◆ | GA78161 | 27 81 |
| **GC101** | Dako Omnis Slide Rack | 6 racks | GC10130 | 23 |
| **GC102** | Dako Omnis ISH Lid | 5 lids | GC10230 | 24 179 |
| **GC103** | Dako Omnis Slide Rack Color Clip, Red | 25 clips | GC10330 | 23 |
| **GC104** | Dako Omnis Slide Rack Color Clip, Blue | 25 clips | GC10430 | 23 |
| **GC105** | Dako Omnis Slide Rack Color Clip, Green | 25 clips | GC10530 | 23 |
| **GC106** | Dako Omnis Slide Rack Color Clip, Gray | 25 clips | GC10630 | 23 |
| **GC107** | Dako Omnis Mixing Strip | 25 strips | GC10730 | 23 |
| **GC116** | Dako Omnis Mixing Device | 1 unit | GC11630 | 24 179 |
| **GC201** | Dako Omnis Small Vial, 2 mL | 25 x 2 mL | GC20130 | 23 |
| **GC202** | Dako Omnis Large Vial, 30 mL | 25 x 30 mL | GC20230 | 23 |
| **GC203** | Sulfuric Acid, 0.3 M | 10 x 22.5 mL | GC20330 | 23 |
| **GC206** | Dako Omnis Vial with Mixing Ball, 2 mL | 2 mL | GC20630 | 24 179 |
| **GC207** | ISH Cleaning Solution (Dako Omnis) | 100 tests, 10 mL | GC20730 | 24 179 |
| **GC807** | Wash Buffer (20x) (Dako Omnis) | 20 x 175 mL, 1700 tests | GC80711 | 23 128 |
| **GC808** | Hematoxylin (Dako Omnis) | 8 x 22.5 mL, 600 tests | GC80811 | 23 128 |
| **GC810** | Clearify™ | 3.8 L | GC81030 | 23 |
| **GI100** | Dako Omnis | 1 unit | GI10030 | 21 |
| **GM300** | ISH Ethanol Solution, 96% (Dako Omnis) | 20 tests, 14 mL | GM30011 | 24 179 |
| **GM301** | ISH Pre-Treatment Solution (20x) (Dako Omnis) | 175 mL | GM30111 | 24 179 |
| **GM302** | ISH Pepsin (Dako Omnis) | 20 tests, 7 mL | GM30211 | 24 179 |
| **GM303** | ISH Stringent Wash Buffer (20x) (Dako Omnis) | 175 mL | GM30311 | 24 179 |
| **GM304** | Fluorescence Mounting Medium (Dako Omnis) | 20 tests, 0.8 mL | GM30411 | 24 179 |
| **GV800** | EnVision FLEX, High pH (Dako Omnis) | 600 tests | GV80011 | 33 127 |
| **GV804** | EnVision FLEX Target Retrieval Solution, High pH (50x) (Dako Omnis) | 3 x 68 mL, 225 tests | GV80411 | 33 128 |
| **GV805** | EnVision FLEX Target Retrieval Solution, Low pH (50x) (Dako Omnis) | 3 x 68 mL, 225 tests | GV80511 | 33 128 |
| **GV809** | EnVision FLEX+ Rabbit LINKER (Dako Omnis) | 22.5 mL, 75 tests | GV80911 | 33 128 |
| **GV821** | EnVision FLEX+ Mouse LINKER (Dako Omnis) | 22.5 mL, 75 tests | GV82111 | 33 128 |
| **GV823** | EnVision FLEX Mini Kit, High pH (Dako Omnis) | 150 tests | GV82311 | 33 127 |
| **GV825** | EnVision FLEX DAB+ Substrate Chromogen System (Dako Omnis) | 150 tests | GV82511 | 23 128 |

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|---|---|---|---|---|
| **IC001** | DuoFLEX Cocktail, Anti-S100, Anti-Tyrosinase, Anti-Melan-A, Ready-to-Use (Link) | 6 mL | IC00106 | 116 |
| **IC002** | DuoFLEX Cocktail, Anti-CD3, Anti-CD20cy, Ready-to-Use (Link) | 6 mL | IC00206 | 115 |
| **IC004** | DuoFLEX Cocktail, Anti-AMACR, Anti-Cytokeratin HMW, Anti-Cytokeratin 5/6, Ready-to-Use (Link) | 6 mL | IC00406 | 115 |
| **IR002** | FLEX Polyclonal Guinea Pig Anti-Insulin, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR00261 | 47 97 |
| **IR051** | FLEX Monoclonal Mouse Anti-Human Cytokeratin, High Molecular Weight, Clone 34βE12, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR05161 | 46 90 |
| **IR052** | FLEX Monoclonal Mouse Anti-Human Melanosome, Clone HMB-45, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR05261 | 48 101 |
| **IR053** | FLEX Monoclonal Mouse Anti-Human Cytokeratin, Clone AE1/AE3, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR05361 | 45 87 |
| **IR054** | FLEX Monoclonal Mouse Anti-Human Caldesmon, Clone h-CD, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR05461 | 42 76 |
| **IR055** | FLEX Monoclonal Mouse Anti-Human Wilms' Tumor 1 (WT1) Protein, Clone 6F-H2, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR05561 | 51 114 |
| **IR056** | FLEX Monoclonal Mouse Anti-Thyroid Transcription Factor, Clone 8G7G3/1, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR05661 | 51 112 |

● Packaged in vials for use with Autostainer Link 48
▲ Packaged in vials for use with Autostainer Link instruments

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| **IR057** | FLEX Monoclonal Mouse Anti-Human CD99, MIC2 Gene Products, Ewing's Sarcoma Marker, Clone 12E7, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR05761 | 44 84 |
| **IR058** | FLEX Monoclonal Mouse Anti-Human Inhibin α, Clone R1, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR05861 | 47 97 |
| **IR059** | FLEX Monoclonal Mouse Anti-Human E-Cadherin, Clone NCH-38, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR05961 | 46 90 |
| **IR060** | FLEX Monoclonal Rabbit Anti-Human AMACR, Clone 13H4, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR06061 | 41 74 |
| **IR061** | FLEX Monoclonal Mouse Anti-Human Tyrosinase, Clone T311, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR06161 | 51 112 |
| **IR062** | FLEX Monoclonal Mouse Anti-Human CD15, Clone Carb-3, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR06261 | 43 80 |
| **IR066** | FLEX Monoclonal Mouse Anti-Human Smooth Muscle Myosin Heavy Chain, Clone SMMS-1, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR06661 | 50 104 |
| **IR067** | FLEX Monoclonal Mouse Anti-Myogenin, Clone F5D, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR06761 | 49 104 |
| **IR068** | FLEX Monoclonal Mouse Anti-Human Progesterone Receptor, Clone PgR 636, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR06861 | 50 108 |
| **IR069** | FLEX Monoclonal Mouse Anti-Human CD1a, Clone 010, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR06961 | 42 77 |
| **IR072** | FLEX Monoclonal Mouse Anti-Human Podoplanin, Clone D2-40, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR07261 | 50 107 |
| **IR074** | FLEX Monoclonal Mouse Anti-Human Mammaglobin, Clone 304-1A5, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR07461 | 48 100 |
| **IR075** | FLEX Monoclonal Mouse Anti-Human Renal Cell Carcinoma Marker, Clone SPM314, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR07561 | 50 109 |
| **IR076** | FLEX Monoclonal Mouse Anti-Villin, Clone 1D2 C3, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR07661 | 51 113 |
| **IR077** | FLEX Monoclonal Mouse Anti-Human Gross Cystic Disease Fluid Protein-15, Clone 23A3, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR07761 | 47 95 |
| **IR079** | FLEX Monoclonal Mouse Anti-Human MutL Protein Homolog 1, Clone ES05, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR07961 | 48 102 |
| **IR080** | FLEX Monoclonal Mouse Anti-Human CDX2, Clone DAK-CDX2, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR08061 | 45 86 |
| **IR082** | FLEX Monoclonal Mouse Anti-Human CD5, Clone 4C7, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR08261 | 42 78 |
| **IR083** | FLEX Monoclonal Rabbit Anti-Human Cyclin D1, Clone EP12, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR08361 | 45 87 |
| **IR084** | FLEX Monoclonal Rabbit Anti-Human Estrogen Receptor α, Clone EP1, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR08461 | 46 93 |
| **IR085** | FLEX Monoclonal Mouse Anti-Human MutS Protein Homolog 2, Clone FE11, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR08561 | 49 102 |
| **IR086** | FLEX Monoclonal Rabbit Anti-Human MutS Protein Homolog 6, Clone EP49, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR08661 | 49 103 |
| **IR087** | FLEX Monoclonal Rabbit Anti-Human Postmeiotic Segregration Increased 2, Clone EP51, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR08761 | 50 107 |
| **IR088** | FLEX Monoclonal Mouse Anti-Human Prostein, Clone 10E3 (Link) | 60 tests, 12 mL▲ | IR08861 | 50 109 |
| **IR089** | FLEX Monoclonal Mouse Anti-Human Prostate-Specific Membrane Antigen, Clone 3E6 (Link) | 60 tests, 12 mL▲ | IR08961 | 50 109 |
| **IR091** | FLEX Monoclonal Mouse Anti-Human ERCC1, Clone 4F9, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR09161 | 46 92 |
| **IR092** | FLEX Monoclonal Mouse Anti-Human Octamer-Binding Transcription Factor 3/4, Clone N1NK, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR09261 | 49 105 |
| **IR093** | FLEX Monoclonal Rabbit Anti-Human Terminal Deoxynucleotidyl Transferase (TdT), Clone EP266, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR09361 | 51 111 |
| **IR094** | FLEX Monoclonal Rabbit Anti-Human Cytokeratin 8/18, Clone EP17/EP30, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR09461 | 45 88 |
| **IR500** | FLEX Polyclonal Rabbit Anti-Human Alpha-1-Fetoprotein, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR50061 | 41 73 |
| **IR503** | FLEX Polyclonal Rabbit Anti-Human CD3, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR50361 | 42 78 |
| **IR504** | FLEX Polyclonal Rabbit Anti-S100, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR50461 | 50 110 |
| **IR506** | FLEX Polyclonal Rabbit Anti-Human Kappa Light Chains, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR50661 | 47 98 |
| **IR507** | FLEX Polyclonal Rabbit Anti-Human Lambda Light Chains, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR50761 | 48 98 |
| **IR508** | FLEX Polyclonal Rabbit Anti-Human Chorionic Gonadotropin, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR50861 | 45 86 |
| **IR509** | FLEX Polyclonal Rabbit Anti-Human Thyroglobulin, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR50961 | 51 111 |
| **IR510** | FLEX Polyclonal Rabbit Anti-Human IgA, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR51061 | 47 96 |
| **IR511** | FLEX Polyclonal Rabbit Anti-Human Myeloperoxidase, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR51161 | 49 103 |
| **IR512** | FLEX Polyclonal Rabbit Anti-Human IgG, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR51261 | 47 96 |
| **IR513** | FLEX Polyclonal Rabbit Anti-Human IgM, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR51361 | 47 97 |
| **IR514** | FLEX Polyclonal Rabbit Anti-Human Prostate-Specific Antigen, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR51461 | 50 108 |
| **IR515** | FLEX Polyclonal Rabbit Anti-Human Calcitonin, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR51561 | 41 76 |
| **IR517** | FLEX Polyclonal Rabbit Anti-Human IgD, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR51761 | 47 96 |
| **IR519** | FLEX Polyclonal Rabbit Anti-Human Gastrin, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR51961 | 46 94 |
| **IR524** | FLEX Polyclonal Rabbit Anti-Glial Fibrillary Acidic Protein, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR52461 | 47 94 |
| **IR526** | FLEX Polyclonal Rabbit Anti-Human Carcinoembryonic Antigen, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR52661 | 42 77 |

▲ Packaged in vials for use with Autostainer Link instruments

# Product Code Index (continued)

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|---|---|---|---|---|
| **IR527** | FLEX Polyclonal Rabbit Anti-Human Von Willebrand Factor, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR52761 | 51 114 |
| **IR600** | FLEX Universal Negative Control, Rabbit, Ready-to-Use (Link) | 120 tests, 24 mL▲ | IR60066 | 52 121 |
| **IR602** | FLEX Monoclonal Mouse Anti-Human CD30, Clone Ber-H2, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR60261 | 43 81 |
| **IR604** | FLEX Monoclonal Mouse Anti-Human CD20cy, Clone L26, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR60461 | 43 80 |
| **IR606** | FLEX Monoclonal Mouse Anti-Human Desmin, Clone D33, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR60661 | 46 90 |
| **IR607** | FLEX Monoclonal Mouse Anti-Human Neurofilament Protein, Clone 2F11, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR60761 | 49 104 |
| **IR608** | FLEX Monoclonal Mouse Anti-Human CD21, Clone 1F8, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR60861 | 43 80 |
| **IR609** | FLEX Monoclonal Mouse Anti-Human CD68, Clone KP1, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR60961 | 44 84 |
| **IR610** | FLEX Monoclonal Mouse Anti-Human CD31, Endothelial Cell, Clone JC70A, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR61061 | 43 81 |
| **IR611** | FLEX Monoclonal Mouse Anti-Human Smooth Muscle Actin, Clone 1A4, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR61161 | 41 73 |
| **IR612** | FLEX Monoclonal Mouse Anti-Human Neuron-Specific Enolase, Clone BBS/NC/VI-H14, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR61261 | 49 104 |
| **IR613** | FLEX Monoclonal Mouse Anti-Human CD68, Clone PG-M1, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR61361 | 44 84 |
| **IR614** | FLEX Monoclonal Mouse Anti-Human BCL2 Oncoprotein, Clone 124, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR61461 | 41 74 |
| **IR615** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 19, Clone RCK108, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR61561 | 45 89 |
| **IR616** | FLEX Monoclonal Mouse Anti-Human p53 Protein, Clone DO-7, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR61661 | 49 106 |
| **IR618** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 18, Clone DC 10, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR61861 | 45 89 |
| **IR619** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 7, Clone OV-TL 12/30, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR61961 | 45 88 |
| **IR620** | FLEX Monoclonal Mouse Anti-Cytokeratin 17, Clone E3, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR62061 | 45 89 |
| **IR621** | FLEX Monoclonal Mouse Anti-Human CD79α, Clone JCB117, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR62161 | 44 84 |
| **IR622** | FLEX Monoclonal Mouse Anti-Human Carcinoembryonic Antigen, Clone II-7, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR62261 | 42 77 |
| **IR623** | FLEX Monoclonal Mouse Anti-Human CD8, Clone C8/144B, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR62361 | 43 79 |
| **IR624** | FLEX Monoclonal Mouse Anti-Human Hepatocyte, Clone OCH1E5, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR62461 | 47 95 |
| **IR625** | FLEX Monoclonal Mouse Anti-Human BCL6 Protein, Clone PG-B6p, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR62561 | 41 75 |
| **IR626** | FLEX Monoclonal Mouse Anti-Human Ki-67 Antigen, Clone MIB-1, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR62661 | 48 98 |
| **IR627** | FLEX Monoclonal Mouse Anti-Human Calretinin, Clone DAK-Calret 1, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR62761 | 42 77 |
| **IR628** | FLEX Monoclonal Mouse Anti-Human CD56, Clone 123C3, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR62861 | 44 83 |
| **IR629** | FLEX Monoclonal Mouse Anti-Human Epithelial Membrane Antigen, Clone E29, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR62961 | 46 92 |
| **IR630** | FLEX Monoclonal Mouse Anti-Vimentin, Clone V9, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR63061 | 51 113 |
| **IR632** | FLEX Monoclonal Mouse Anti-Human CD34 Class II, Clone QBEnd 10, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR63261 | 43 82 |
| **IR633** | FLEX Monoclonal Mouse Anti-Human Melan-A, Clone A103, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR63361 | 48 100 |
| **IR636** | FLEX Monoclonal Mouse Anti-Human CD43, Clone DF-T1, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR63661 | 44 82 |
| **IR637** | FLEX Monoclonal Mouse Anti-Human Epithelial Antigen, Clone Ber-EP4, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR63761 | 46 91 |
| **IR640** | FLEX Monoclonal Mouse Anti-Human Mast Cell Tryptase, Clone AA1, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR64061 | 48 100 |
| **IR641** | FLEX Monoclonal Mouse Anti-Human CD246, ALK Protein, Clone ALK1, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR64161 | 44 86 |
| **IR642** | FLEX Monoclonal Mouse Anti-Human CD138, Clone MI15, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR64261 | 44 85 |
| **IR643** | FLEX Monoclonal Mouse Anti-Human CD7, Clone CBC.37, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR64361 | 42 79 |
| **IR644** | FLEX Monoclonal Mouse Anti-Human MUM1 Protein, Clone MUM1p, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR64461 | 48 102 |
| **IR647** | FLEX Monoclonal Mouse Anti-Human CD57, Clone TB01, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR64761 | 44 83 |
| **IR648** | FLEX Monoclonal Mouse Anti-Human CD10, Clone 56C6, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR64861 | 43 79 |
| **IR649** | FLEX Monoclonal Mouse Anti-Human CD4, Clone 4B12, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR64961 | 42 78 |
| **IR650** | FLEX Monoclonal Mouse Anti-Human B-Cell-Specific Activator Protein, Clone DAK-Pax5, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR65061 | 41 74 |
| **IR651** | FLEX Monoclonal Mouse Anti-Human CD2, Clone AB75, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR65161 | 42 78 |
| **IR652** | FLEX Monoclonal Mouse Anti-Human Nucleophosmin, Clone 376, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR65261 | 49 105 |
| **IR653** | FLEX Monoclonal Mouse Anti-Human ZAP-70, Clone 2F3.2, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR65361 | 51 114 |
| **IR656** | FLEX Monoclonal Mouse Anti-Human CD19, Clone LE-CD19, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR65661 | 43 80 |
| **IR658** | FLEX Monoclonal Mouse Anti-Human MUC2, Clone CCP58, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR65861 | 48 101 |
| **IR659** | FLEX Monoclonal Rabbit Anti-Human ERG, Clone EP111, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR65961 | 46 92 |
| **IR660** | FLEX Monoclonal Mouse Anti-Human Synaptophysin, Clone DAK-SYNAP, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR66061 | 50 110 |

▲ Packaged in vials for use with Autostainer Link instruments

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|---|---|---|---|---|
| **IR661** | FLEX Monoclonal Mouse Anti-Human MUC5AC, Clone CLH2, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR66161 | 48 102 |
| **IR700** | FLEX Monoclonal Mouse Anti-Human Muscle Actin, Clone HHF35, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR70061 | 41 73 |
| **IR701** | FLEX Monoclonal Mouse Anti-Human CA 125, Clone M11, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR70161 | 41 76 |
| **IR702** | FLEX Monoclonal Mouse Anti-Human Beta-Catenin, Clone β-Catenin-1, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR70261 | 41 75 |
| **IR750** | FLEX Universal Negative Control, Mouse, Ready-to-Use (Link) | 120 tests, 24 mL▲ | IR75066 | 52 121 |
| **IR751** | FLEX Monoclonal Mouse Anti-Human CD45, Leucocyte Common Antigen, Clones 2B11 + PD7/26, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR75161 | 44 82 |
| **IR777** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 20, Clone $K_s$20.8, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR77761 | 46 89 |
| **IR779** | FLEX Monoclonal Mouse Anti-Human Placental Alkaline Phosphatase, Clone 8A9, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR77961 | 49 107 |
| **IR780** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 5/6, Clone D5/16 B4, Ready-to-Use (Link) | 60 tests, 12 mL▲ | IR78061 | 45 88 |
| **IR781** | FLEX Monoclonal Mouse Anti-Human CD23, Clone DAK-CD23 (Link) | 60 tests, 12 mL▲ | IR78161 | 43 81 |
| **IS002** | FLEX Polyclonal Guinea Pig Anti-Insulin, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS00230 | 58 97 |
| **IS051** | FLEX Monoclonal Mouse Anti-Human Cytokeratin, High Molecular Weight, Clone 34βE12, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS05130 | 57 90 |
| **IS052** | FLEX Monoclonal Mouse Anti-Human Melanosome, Clone HMB-45, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS05230 | 58 101 |
| **IS053** | FLEX Monoclonal Mouse Anti-Human Cytokeratin, Clone AE1/AE3, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS05330 | 57 87 |
| **IS054** | FLEX Monoclonal Mouse Anti-Human Caldesmon, Clone h-CD, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS05430 | 56 76 |
| **IS055** | FLEX Monoclonal Mouse Anti-Human Wilms' Tumor 1 (WT1) Protein, Clone 6F-H2, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS05530 | 58 114 |
| **IS056** | FLEX Monoclonal Mouse Anti-Thyroid Transcription Factor, Clone 8G7G3/1, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS05630 | 58 112 |
| **IS057** | FLEX Monoclonal Mouse Anti-Human CD99, MIC2 Gene Products, Ewing's Sarcoma Marker, Clone 12E7, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS05730 | 57 84 |
| **IS058** | FLEX Monoclonal Mouse Anti-Human Inhibin α, Clone R1, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS05830 | 57 97 |
| **IS059** | FLEX Monoclonal Mouse Anti-Human E-Cadherin, Clone NCH-38, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS05930 | 57 90 |
| **IS060** | FLEX Monoclonal Rabbit Anti-Human AMACR, Clone 13H4, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS06030 | 56 74 |
| **IS061** | FLEX Monoclonal Mouse Anti-Human Tyrosinase, Clone T311, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS06130 | 58 112 |
| **IS062** | FLEX Monoclonal Mouse Anti-Human CD15, Clone Carb-3, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS06230 | 56 80 |
| **IS066** | FLEX Monoclonal Mouse Anti-Human Smooth Muscle Myosin Heavy Chain, Clone SMMS-1, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS06630 | 58 104 |
| **IS067** | FLEX Monoclonal Mouse Anti-Myogenin, Clone F5D, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS06730 | 58 104 |
| **IS069** | FLEX Monoclonal Mouse Anti-Human CD1a, Clone 010, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS06930 | 56 77 |
| **IS072** | FLEX Monoclonal Mouse Anti-Human Podoplanin Clone D2-40, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS07230 | 58 107 |
| **IS074** | FLEX Monoclonal Mouse Anti-Human Mammaglobin, Clone 304-1A5, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS07430 | 58 100 |
| **IS075** | FLEX Monoclonal Mouse Anti-Human Renal Cell Carcinoma Marker, Clone SPM314, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS07530 | 58 109 |
| **IS076** | FLEX Monoclonal Mouse Anti-Villin, Clone 1D2 C3, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS07630 | 58 113 |
| **IS077** | FLEX Monoclonal Mouse Anti-Human Gross Cystic Disease Fluid Protein-15, Clone 23A3, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS07730 | 57 95 |
| **IS079** | FLEX Monoclonal Mouse Anti-Human MutL Protein Homolog 1, Clone ES05, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS07930 | 58 102 |
| **IS080** | FLEX Monoclonal Mouse Anti-Human CDX2, Clone DAK-CDX2, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS08030 | 57 86 |
| **IS082** | FLEX Monoclonal Mouse Anti-Human CD5, Clone 4C7, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS08230 | 56 78 |
| **IS083** | FLEX Monoclonal Rabbit Anti-Human Cyclin D1, Clone EP12, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS08330 | 57 87 |
| **IS500** | FLEX Polyclonal Rabbit Anti-Human Alpha-1-Fetoprotein, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS50030 | 56 73 |
| **IS503** | FLEX Polyclonal Rabbit Anti-Human CD3, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS50330 | 56 78 |
| **IS504** | FLEX Polyclonal Rabbit Anti-S100, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS50430 | 58 110 |
| **IS506** | FLEX Polyclonal Rabbit Anti-Human Kappa Light Chains, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS50630 | 58 98 |

▲ Packaged in vials for use with Autostainer Link instruments
△ Packaged in vials for use with Dako Autostainer instruments

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| **IS507** | FLEX Polyclonal Rabbit Anti-Human Lambda Light Chains, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS50730 | 58 98 |
| **IS508** | FLEX Polyclonal Rabbit Anti-Human Chorionic Gonadotropin, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS50830 | 57 86 |
| **IS509** | FLEX Polyclonal Rabbit Anti-Human Thyroglobulin, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS50930 | 58 111 |
| **IS510** | FLEX Polyclonal Rabbit Anti-Human IgA, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS51030 | 57 96 |
| **IS511** | FLEX Polyclonal Rabbit Anti-Human Myeloperoxidase, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS51130 | 58 103 |
| **IS512** | FLEX Polyclonal Rabbit Anti-Human IgG, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS51230 | 57 96 |
| **IS513** | FLEX Polyclonal Rabbit Anti-Human IgM, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS51330 | 57 97 |
| **IS514** | FLEX Polyclonal Rabbit Anti-Human Prostate-Specific Antigen, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS51430 | 58 108 |
| **IS515** | FLEX Polyclonal Rabbit Anti-Human Calcitonin, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS51530 | 56 76 |
| **IS517** | FLEX Polyclonal Rabbit Anti-Human IgD, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS51730 | 57 96 |
| **IS519** | FLEX Polyclonal Rabbit Anti-Human Gastrin, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS51930 | 57 94 |
| **IS524** | FLEX Polyclonal Rabbit Anti-Glial Fibrillary Acidic Protein, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS52430 | 57 94 |
| **IS526** | FLEX Polyclonal Rabbit Anti-Human Carcinoembryonic Antigen, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS52630 | 56 77 |
| **IS527** | FLEX Polyclonal Rabbit Anti-Human Von Willebrand Factor, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS52730 | 58 114 |
| **IS600** | FLEX Universal Negative Control, Rabbit, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 60 tests, 12 mL△ | IS60061 | 59 121 |
| **IS602** | FLEX Monoclonal Mouse Anti-Human CD30, Clone Ber-H2, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS60230 | 56 81 |
| **IS604** | FLEX Monoclonal Mouse Anti-Human CD20cy, Clone L26, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS60430 | 56 80 |
| **IS606** | FLEX Monoclonal Mouse Anti-Human Desmin, Clone D33, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS60630 | 57 90 |
| **IS607** | FLEX Monoclonal Mouse Anti-Human Neurofilament Protein, Clone 2F11, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS60730 | 58 104 |
| **IS608** | FLEX Monoclonal Mouse Anti-Human CD21, Clone 1F8, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS60830 | 56 80 |
| **IS609** | FLEX Monoclonal Mouse Anti-Human CD68, Clone KP1, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS60930 | 57 84 |
| **IS610** | FLEX Monoclonal Mouse Anti-Human CD31, Endothelial Cell, Clone JC70A, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS61030 | 56 81 |
| **IS611** | FLEX Monoclonal Mouse Anti-Human Smooth Muscle Actin, Clone 1A4, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS61130 | 56 73 |
| **IS612** | FLEX Monoclonal Mouse Anti-Human Neuron-Specific Enolase, Clone BBS/NC/VI-H14, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS61230 | 58 104 |
| **IS613** | FLEX Monoclonal Mouse Anti-Human CD68, Clone PG-M1, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS61330 | 57 84 |
| **IS614** | FLEX Monoclonal Mouse Anti-Human BCL2 Oncoprotein, Clone 124, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS61430 | 56 74 |
| **IS615** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 19, Clone RCK108, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS61530 | 57 89 |
| **IS616** | FLEX Monoclonal Mouse Anti-Human p53 Protein, Clone DO-7, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS61630 | 58 106 |
| **IS618** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 18, Clone DC 10, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS61830 | 57 89 |
| **IS619** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 7, Clone OV-TL 12/30, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS61930 | 57 88 |
| **IS620** | FLEX Monoclonal Mouse Anti-Cytokeratin 17, Clone E3, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS62030 | 57 89 |
| **IS621** | FLEX Monoclonal Mouse Anti-Human CD79α, Clone JCB117, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS62130 | 57 84 |
| **IS622** | FLEX Monoclonal Mouse Anti-Human Carcinoembryonic Antigen, Clone II-7, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS62230 | 56 77 |
| **IS623** | FLEX Monoclonal Mouse Anti-Human CD8, Clone C8/144B, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS62330 | 56 79 |
| **IS624** | FLEX Monoclonal Mouse Anti-Human Hepatocyte, Clone OCH1E5, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS62430 | 57 95 |
| **IS625** | FLEX Monoclonal Mouse Anti-Human BCL6 Protein, Clone PG-B6p, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS62530 | 56 75 |
| **IS626** | FLEX Monoclonal Mouse Anti-Human Ki-67 Antigen, Clone MIB-1, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS62630 | 58 98 |

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| **IS627** | FLEX Monoclonal Mouse Anti-Human Calretinin, Clone DAK-Calret 1, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS62730 | 56 77 |
| **IS628** | FLEX Monoclonal Mouse Anti-Human CD56, Clone 123C3, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS62830 | 57 83 |
| **IS629** | FLEX Monoclonal Mouse Anti-Human Epithelial Membrane Antigen, Clone E29, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS62930 | 57 92 |
| **IS630** | FLEX Monoclonal Mouse Anti-Vimentin, Clone V9, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS63030 | 58 113 |
| **IS632** | FLEX Monoclonal Mouse Anti-Human CD34 Class II, Clone QBEnd 10, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS63230 | 56 82 |
| **IS633** | FLEX Monoclonal Mouse Anti-Human Melan-A, Clone A103, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS63330 | 58 100 |
| **IS636** | FLEX Monoclonal Mouse Anti-Human CD43, Clone DF-T1, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS63630 | 57 82 |
| **IS637** | FLEX Monoclonal Mouse Anti-Human Epithelial Antigen, Clone Ber-EP4, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS63730 | 57 91 |
| **IS640** | FLEX Monoclonal Mouse Anti-Human Mast Cell Tryptase, Clone AA1, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS64030 | 58 100 |
| **IS641** | FLEX Monoclonal Mouse Anti-Human CD246, ALK Protein, Clone ALK1, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS64130 | 57 86 |
| **IS642** | FLEX Monoclonal Mouse Anti-Human CD138, Clone MI15, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS64230 | 57 85 |
| **IS643** | FLEX Monoclonal Mouse Anti-Human CD7, Clone CBC.37, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS64330 | 56 79 |
| **IS644** | FLEX Monoclonal Mouse Anti-Human MUM1 Protein, Clone MUM1p, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS64430 | 58 102 |
| **IS647** | FLEX Monoclonal Mouse Anti-Human CD57, Clone TB01, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS64730 | 57 83 |
| **IS648** | FLEX Monoclonal Mouse Anti-Human CD10, Clone 56C6, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS64830 | 56 79 |
| **IS649** | FLEX Monoclonal Mouse Anti-Human CD4, Clone 4B12, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS64930 | 56 78 |
| **IS650** | FLEX Monoclonal Mouse Anti-Human B-Cell-Specific Activator Protein, Clone DAK-Pax5, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS65030 | 56 74 |
| **IS651** | FLEX Monoclonal Mouse Anti-Human CD2, Clone AB75, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS65130 | 56 78 |
| **IS656** | FLEX Monoclonal Mouse Anti-Human CD19, Clone LE-CD19, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS65630 | 56 80 |
| **IS700** | FLEX Monoclonal Mouse Anti-Human Muscle Actin, Clone HHF35, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS70030 | 56 73 |
| **IS701** | FLEX Monoclonal Mouse Anti-Human CA 125, Clone M11, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS70130 | 56 76 |
| **IS702** | FLEX Monoclonal Mouse Anti-Human Beta-Catenin, Clone β-Catenin-1, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS70230 | 56 75 |
| **IS750** | FLEX Universal Negative Control, Mouse, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 60 tests, 12 mL△ | IS75061 | 59 121 |
| **IS751** | FLEX Monoclonal Mouse Anti-Human CD45, Leucocyte Common Antigen, Clones 2B11 + PD7/26, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS75130 | 57 82 |
| **IS777** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 20, Clone $K_s$20.8, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS77730 | 57 89 |
| **IS779** | FLEX Monoclonal Mouse Anti-Human Placental Alkaline Phosphatase, Clone 8A9, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS77930 | 58 107 |
| **IS780** | FLEX Monoclonal Mouse Anti-Human Cytokeratin 5/6, Clone D5/16 B4, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS78030 | 57 88 |
| **IS781** | FLEX Monoclonal Mouse Anti-Human CD23, Clone DAK-CD23, Ready-to-Use (Dako Autostainer/Autostainer Plus) | 30 tests, 6 mL△ | IS78130 | 56 81 |
| **K** | | | | |
| **K0598** | BCIP/NBT Substrate System | 150 tests | K059811 | 133 |
| **K0601** | In Situ Hybridization Detection System (AP), for Biotinylated Probes | 50 tests | K060111 | 177 |
| **K0609** | Universal LSAB2 Kit/HRP, Rabbit/Mouse | 150 tests | K060911 | 132 |
| **K0620** | GenPoint™, Catalyzed Signal Amplification System, for In Situ Hybridization | 65 tests | K062011 | 176 |
| **K0625** | Fuchsin+ Substrate-Chromogen | 300 tests, 30 mL<br>1100 tests, 110 mL | K062511<br>K062530 | 133 |
| **K0626** | Chemiluminescent System for Nucleic Acid Blotting (20 Blots x 150 $cm^2$) | 20 blots | K062611 | 178 |
| **K0640** | Dako Liquid Permanent Red | 300 tests, 30 mL<br>1100 tests, 110 mL | K064011<br>K064030 | 133 |
| **K0675** | Universal LSAB2 Kit/HRP, Rabbit/Mouse (10 x 11 mL Link + 10 x 11 mL Streptavidin/HRP) | 1100 tests<br>1100 tests, 10 x 11 mL△ | K067511<br>K067589 | 61 132 |

△ Packaged in vials for use with Dako Autostainer instruments

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| **K0695** | Permanent Red Substrate System | 10 tablets, 30 mL | K069511 | 133 |
| **K0698** | New Fuchsin Substrate System | 1750 tests | K069811 | 133 |
| **K1492** | EGFR pharmDx Kit for Manual Use | 35 tests | K149211 | 144 |
| **K1494** | EGFR pharmDx Kit for the Dako Autostainer | 50 tests | K149489 | 55 144 |
| **K1497** | CSA II System, Biotin Free | 150 tests, 15 mL | K149711 | 132 |
| **K1500** | Catalyzed Signal Amplification (CSA) System | 150 tests | K150011 | 132 |
| **K1501** | CSA II Rabbit Link | 150 tests, 15 mL | K150180 | 132 |
| **K1906** | c-Kit pharmDx for Manual Use | 25 tests | K190611 | 143 |
| **K1907** | c-Kit pharmDx for the Dako Autostainer | 35 tests | K190787 | 55 143 |
| **K3461** | AEC+ Substrate-Chromogen, Ready-to-Use | 150 tests, 15 mL | K346111 | 54 133 |
| **K3464** | AEC Substrate-Chromogen, Ready-to-Use | 1100 tests, 110 mL | K346430 | 133 |
| **K3467** | Liquid DAB+ | 150 tests, 15 mL | K346711 | 133 |
| **K3468** | Liquid DAB+ | 1100 tests, 110 mL<br>1100 tests, 10 x 11 mL△ | K346811<br>K346889 | 54 133 |
| **K3469** | AEC+ Substrate-Chromogen, Ready-to-Use | 1100 tests, 110 mL | K346911 | 54 133 |
| **K3954** | ARK (Animal Research Kit)/HRP | 150 tests | K395411 | 132 |
| **K4000** | EnVision+/HRP, Mouse | 150 tests, 15 mL | K400011 | 131 |
| **K4001** | EnVision+/HRP, Mouse | 1100 tests, 110 mL | K400111 | 131 |
| **K4002** | EnVision+/HRP, Rabbit | 150 tests, 15 mL | K400211 | 131 |
| **K4003** | EnVision+/HRP, Rabbit | 1100 tests, 110 mL | K400311 | 131 |
| **K4004** | EnVision+ System/HRP, Mouse (AEC+) | 150 tests | K400411 | 131 |
| **K4005** | EnVision+ System/HRP, Mouse (AEC+) | 1100 tests | K400511 | 61 131 |
| **K4006** | EnVision+ System/HRP, Mouse (DAB+) | 150 tests | K400611 | 131 |
| **K4007** | EnVision+ System/HRP, Mouse (DAB+) | 1100 tests | K400711 | 61 131 |
| **K4008** | EnVision+ System/HRP, Rabbit (AEC+) | 150 tests | K400811 | 131 |
| **K4009** | EnVision+ System/HRP, Rabbit (AEC+) | 1100 tests | K400911 | 61 131 |
| **K4010** | EnVision+ System/HRP, Rabbit (DAB+) | 150 tests | K401011 | 131 |
| **K4011** | EnVision+ System/HRP, Rabbit (DAB+) | 1100 tests | K401111 | 61 131 |
| **K4061** | EnVision+/HRP, Dual Link, Rabbit/Mouse | 1100 tests, 10 x 11 mL△ | K406189 | 61 131 |
| **K4063** | EnVision+/HRP, Dual Link Rabbit/Mouse | 150 tests, 15 mL | K406311 | 131 |
| **K4065** | EnVision+ Detection System Peroxidase/DAB, Rabbit/Mouse | 150 tests | K406511 | 61 131 |
| **K4068** | ADVANCE™/HRP, Rabbit/Mouse | 550 tests, 110 mL | K406889 | 61 132 |
| **K4069** | ADVANCE™/HRP, Rabbit/Mouse | 55 tests, 11 mL | K406987 | 61 132 |
| **K4071** | ER/PR pharmDx Kit for the Dako Autostainer | 50 tests | K407111 | 55 146 |
| **K5201** | PNA ISH Detection Kit | 40 tests | K520111 | 177 |
| **K5204** | HercepTest | 35 tests | K520421 | 148 |
| **K5207** | HercepTest for the Dako Autostainer | 50 tests | K520721 | 55 148 |
| **K5325** | Telomere PNA FISH Kit/FITC | 20 tests | K532511 | 171 |
| **K5326** | Telomere PNA FISH Kit/Cy3 | 20 tests | K532611 | 171 |
| **K5355** | EnVision G\|2 System/AP, Rabbit/Mouse (Permanent Red) | 50 tests<br>500 tests | K535511<br>K535521 | 61 131 |
| **K5361** | EnVision G\|2 Doublestain System, Rabbit/Mouse (DAB+/Permanent Red) | 150 tests | K536111 | 61 131 |
| **K5499** | Cytology FISH Accessory Kit | 20 tests | K549911 | 180 |
| **K5731** | *HER2* IQFISH pharmDx | 20 tests | K573111 | 153 169 |
| **K5799** | Histology FISH Accessory Kit | 20 tests | K579911 | 180 |
| **K8000** | EnVision FLEX, High pH (Link) | 400-600 tests | K800021 | 52 127 |
| **K8002** | EnVision FLEX+, High pH (Link) | 400-600 tests | K800221 | 52 127 |
| **K8004** | EnVision FLEX Target Retrieval Solution, High pH (50x) | 3 x 30 mL | K800421 | 53 60 129 |
| **K8005** | EnVision FLEX Target Retrieval Solution, Low pH (50x) | 3 x 30 mL | K800521 | 53 60 129 |
| **K8006** | EnVision FLEX Antibody Diluent | 120 mL | K800621 | 53 60 129 |
| **K8007** | EnVision FLEX Wash Buffer (20x) | 1 L | K800721 | 53 60 129 |
| **K8008** | EnVision FLEX Hematoxylin (Link) | 3 x 45 mL, 400-600 tests | K800821 | 53 129 |

△ Packaged in vials for use with Dako Autostainer instruments

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| **K8009** | EnVision FLEX+ Rabbit (LINKER) (Link) | 40 mL, 130-200 tests | K800921 | 53 129 |
| **K8010** | EnVision FLEX, High pH (Dako Autostainer/Autostainer Plus) | 400-600 tests | K801021 | 59 127 |
| **K8012** | EnVision FLEX+, High pH (Dako Autostainer/Autostainer Plus) | 400-600 tests | K801221 | 59 127 |
| **K8018** | EnVision FLEX Hematoxylin (Dako Autostainer/Autostainer Plus) | 10 x 13 mL, 400-600 tests | K801821 | 60 129 |
| **K8019** | EnVision FLEX+ Rabbit (LINKER) (Dako Autostainer/Autostainer Plus) | 3 x 13 mL, 120-190 tests | K801921 | 60 129 |
| **K8020** | FLEX IHC Microscope Slides | 5 x 100 slides | K802021 | 23 36 54 129 135 |
| **K8021** | EnVision FLEX+ Mouse (LINKER) (Link) | 40 mL, 130-200 tests | K802121 | 53 129 |
| **K8022** | EnVision FLEX+ Mouse (LINKER) (Dako Autostainer/Autostainer Plus) | 3 x 13 mL, 120-190 tests | K802221 | 60 129 |
| **K8023** | EnVision FLEX Mini Kit, High pH (Link) | 125-190 tests | K802321 | 52 127 |
| **K8024** | EnVision FLEX Mini Kit, High pH (Dako Autostainer/Autostainer Plus) | 125-190 tests | K802421 | 59 127 |
| **M** | | | | |
| **M0613** | Monoclonal Mouse Anti-Human Epithelial Membrane Antigen, Clone E29 | 0.2 mL<br>1 mL | M061329<br>M061301 | 92 92 |
| **M0616** | Monoclonal Mouse Anti-Human Von Willebrand Factor, Clone F8/86 | 1 mL | M061601 | 114 |
| **M0617** | Monoclonal Mouse Anti-Thrombomodulin, Clone 1009 | 1 mL | M061701 | 111 |
| **M0630** | Monoclonal Mouse Anti-Human Cytokeratin, High Molecular Weight, Clone 34βE12 | 0.2 mL<br>1 mL | M063029<br>M063001 | 90 |
| **M0633** | Monoclonal Mouse Anti-Rabbit Macrophage, Clone RAM11 | 1 mL | M063301 | 100 |
| **M0634** | Monoclonal Mouse Anti-Human Melanosome, Clone HMB-45 | 0.2 mL<br>1 mL | M063429<br>M063401 | 101 |
| **M0635** | Monoclonal Mouse Anti-Human Muscle Actin, Clone HHF35 | 1 mL | M063501 | 73 |
| **M0638** | Monoclonal Mouse Anti-Human Laminin, Clone 4C7 | 1 mL | M063801 | 99 |
| **M0639** | Monoclonal Mouse Anti-Metallothionein, Clone E9 | 1 mL | M063901 | 101 |
| **M0701** | Monoclonal Mouse Anti-Human CD45, Leucocyte Common Antigen, Clones 2B11 + PD7/26 | 0.2 mL<br>1 mL | M070129<br>M070101 | 82 |
| **M0718** | Monoclonal Mouse Anti-Human CD68, Clone EBM11 | 1 mL | M071801 | 84 |
| **M0725** | Monoclonal Mouse Anti-Vimentin, Clone V9 | 0.2 mL<br>1 mL | M072529<br>M072501 | 113 |
| **M0736** | Monoclonal Mouse Anti-Human HLA-ABC Antigen, Clone W6/32 | 1 mL | M073601 | 95 |
| **M0737** | Monoclonal Mouse Anti-Rabbit Immunoglobulins, Clone MR12/53 | 1 mL | M073701 | 120 |
| **M0742** | Monoclonal Mouse Anti-Human CD45R0, Clone UCHL1 | 1 mL | M074201 | 83 |
| **M0744** | Monoclonal Mouse Anti-Bromodeoxyuridine, Clone Bu20a | 1 mL | M074401 | 75 |
| **M0746** | Monoclonal Mouse Anti-Human HLA-DR Antigen, Alpha-Chain, Clone TAL.1B5 | 1 mL | M074601 | 96 |
| **M0747** | Monoclonal Mouse Anti-Human Myeloid/Histiocyte Antigen, Clone MAC 387 | 1 mL | M074701 | 103 |
| **M0750** | Monoclonal Mouse Anti-Human Prostate-Specific Antigen, Clone ER-PR8 | 0.2 mL | M075029 | 108 |
| **M0751** | Monoclonal Mouse Anti-Human CD30, Clone Ber-H2 | 0.2 mL<br>1 mL | M075129<br>M075101 | 81 |
| **M0752** | Monoclonal Mouse Anti-Human Neutrophil Elastase, Clone NP57 | 1 mL | M075201 | 105 |
| **M0753** | Monoclonal Mouse Anti-Human CD61, Platelet Glycoprotein IIIa, Clone Y2/51 | 1 mL | M075301 | 83 |
| **M0754** | Monoclonal Mouse Anti-Human CD45RA, Clone 4KB5 | 1 mL | M075401 | 83 |
| **M0755** | Monoclonal Mouse Anti-Human CD20cy, Clone L26 | 0.2 mL<br>1 mL | M075529<br>M075501 | 80 |
| **M0758** | Monoclonal Mouse Anti-Human Serotonin, Clone 5HT-H209 | 1 mL | M075801 | 110 |
| **M0760** | Monoclonal Mouse Anti-Human Desmin, Clone D33 | 0.2 mL<br>1 mL | M076029<br>M076001 | 90 |
| **M0761** | Monoclonal Mouse Anti-Human Glial Fibrillary Acidic Protein, Clone 6F2 | 1 mL | M076101 | 94 |
| **M0762** | Monoclonal Mouse Anti-Human Neurofilament Protein, Clone 2F11 | 0.2 mL | M076229 | 104 |
| **M0775** | Monoclonal Mouse Anti-Human HLA-DP, DQ, DR Antigen, Clone CR3/43 | 1 mL | M077501 | 96 |
| **M0781** | Monoclonal Mouse Anti-Human Thyroglobulin, Clone DAK-Tg6 | 1 mL | M078101 | 111 |
| **M0784** | Monoclonal Mouse Anti-Human CD21, Clone 1F8 | 1 mL | M078401 | 80 |
| **M0785** | Monoclonal Mouse Anti-Human Collagen IV, Clone CIV 22 | 1 mL | M078501 | 87 |
| **M0786** | Monoclonal Mouse Anti-Human CD43, Clone DF-T1 | 1 mL | M078601 | 82 |
| **M0792** | Monoclonal Mouse Anti-Human Prostatic Acid Phosphatase, Clone PASE/4LJ | 1 mL | M079201 | 109 |
| **M0804** | Monoclonal Mouse Anti-Human Epithelial Antigen, Clone Ber-EP4 | 0.2 mL<br>1 mL | M080429<br>M080401 | 91 |

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| **M0814** | Monoclonal Mouse Anti-Human CD68, Clone KP1 | 1 mL | M081401 | 84 |
| **M0819** | Monoclonal Mouse Anti-Human CD235a, Glycophorin A, Clone JC159 | 1 mL | M081901 | 85 |
| **M0820** | Monoclonal Mouse Anti-Human Glycophorin C, Clone Ret40f | 1 mL | M082001 | 94 |
| **M0821** | Monoclonal Mouse Anti-Human Cytokeratin, Clone MNF116 | 1 mL | M082101 | 87 |
| **M0823** | Monoclonal Mouse Anti-Human CD31, Endothelial Cell, Clone JC70A | 0.2 mL<br>1 mL | M082329<br>M082301 | 81 |
| **M0825** | Monoclonal Mouse Anti-Human CD14, Clone TÜK4 | 1 mL | M082501 | 79 |
| **M0846** | Monoclonal Mouse Anti-Human CD35, Clone Ber-MAC-DRC | 1 mL | M084601 | 82 |
| **M0851** | Monoclonal Mouse Anti-Human Smooth Muscle Actin, Clone 1A4 | 0.2 mL<br>1 mL | M085129<br>M085101 | 73 |
| **M0854** | Monoclonal Mouse Anti-Cytomegalovirus, Clones CCH2 + DDG9 | 1 mL | M085401 | 90 |
| **M0857** | Monoclonal Mouse Anti-Human Immunodeficiency Virus, p24, Clone Kal-1 | 1 mL | M085701 | 96 |
| **M0869** | Monoclonal Mouse Anti-Human Chromogranin A, Clone DAK-A3 | 0.2 mL<br>1 mL | M086929<br>M086901 | 86 |
| **M0872** | Monoclonal Mouse Anti-Human Beta-Amyloid, Clone 6F/3D | 1 mL | M087201 | 75 |
| **M0873** | Monoclonal Mouse Anti-Human Neuron-Specific Enolase, Clone BBS/NC/VI-H14 | 0.2 mL<br>1 mL | M087329<br>M087301 | 104 |
| **M0874** | Monoclonal Mouse Anti-Sarcomeric Actin, Clone Alpha-Sr-1 | 1 mL | M087401 | 73 |
| **M0876** | Monoclonal Mouse Anti-Human CD68, Clone PG-M1 | 0.2 mL<br>1 mL | M087629<br>M087601 | 84 |
| **M0879** | Monoclonal Mouse Anti-Proliferating Cell Nuclear Antigen, Clone PC10 | 1 mL | M087901 | 108 |
| **M0880** | Monoclonal Mouse Anti-Human Leukaemia, Hairy Cell, Clone DBA.44 | 1 mL | M088001 | 99 |
| **M0887** | Monoclonal Mouse Anti-Human BCL2 Oncoprotein, Clone 124 | 0.2 mL<br>1 mL | M088729<br>M088701 | 74 |
| **M0888** | Monoclonal Mouse Anti-Human Cytokeratin 19, Clone RCK108 | 1 mL | M088801 | 89 |
| **M0897** | Monoclonal Mouse Anti-Epstein-Barr Virus, LMP, Clones CS.1-4 | 1 mL | M089701 | 92 |
| **M3501** | Monoclonal Mouse Anti-Adrenocorticotropin (ACTH), Clone 02A3 | 1 mL | M350101 | 73 |
| **M3502** | Monoclonal Mouse Anti-Human Luteinizing Hormone (LH), Clone C93 | 1 mL | M350201 | 99 |
| **M3503** | Monoclonal Mouse Anti-Human Thyroid-Stimulating Hormone (TSH), Clone 0042 | 1 mL | M350301 | 112 |
| **M3504** | Monoclonal Mouse Anti-Human Follicle-Stimulating Hormone (FSH), Clone C10 | 1 mL | M350401 | 93 |
| **M3505** | Monoclonal Mouse Anti-Human Mesothelial Cell, Clone HBME-1 | 1 mL | M350501 | 101 |
| **M3512** | Monoclonal Mouse Anti-Human MyoD1, Clone 5.8A | 1 mL | M351201 | 103 |
| **M3515** | Monoclonal Mouse Anti-Human Cytokeratin, Clone AE1/AE3 | 0.2 mL<br>1 mL | M351529<br>M351501 | 87 |
| **M3517** | Monoclonal Mouse Anti-Human CA 19-9, Clone 1116-NS-19-9 | 1 mL | M351701 | 76 |
| **M3520** | Monoclonal Mouse Anti-Human CA 125, Clone M11 | 1 mL | M352001 | 76 |
| **M3525** | Monoclonal Mouse Anti-Human Epithelial-Related Antigen, Clone MOC-31 | 1 mL | M352501 | 92 |
| **M3527** | Monoclonal Mouse Anti-Human CD105, Endoglin, Clone SN6h | 1 mL | M352701 | 85 |
| **M3528** | Monoclonal Mouse Anti-Human Papillomavirus (HPV), Clone K1H8 | 1 mL | M352801 | 106 |
| **M3539** | Monoclonal Mouse Anti-Human Beta-Catenin, Clone β-Catenin-1 | 1 mL | M353901 | 75 |
| **M3556** | Monoclonal Mouse Anti-Human Calponin, Clone CALP | 1 mL | M355601 | 77 |
| **M3557** | Monoclonal Mouse Anti-Human Caldesmon, Clone h-CD | 1 mL | M355701 | 76 |
| **M3558** | Monoclonal Mouse Anti-Human Smooth Muscle Myosin Heavy Chain, Clone SMMS-1 | 1 mL | M355801 | 104 |
| **M3559** | Monoclonal Mouse Anti-Myogenin, Clone F5D | 1 mL | M355901 | 104 |
| **M3561** | Monoclonal Mouse Anti-Human Wilms' Tumor 1 (WT1) Protein, Clone 6F-H2 | 1 mL | M356101 | 114 |
| **M3562** | Monoclonal Mouse Anti-Human Androgen Receptor, Clone AR441 | 1 mL | M356201 | 74 |
| **M3563** | Monoclonal Mouse Anti-Human Epidermal Growth Factor Receptor, Clone H11 | 1 mL | M356301 | 91 |
| **M3567** | Monoclonal Mouse Anti-Human Fascin, Clone 55K-2 | 1 mL | M356701 | 93 |
| **M3568** | Monoclonal Mouse Anti-Human Progesterone Receptor, Clone PgR 1294 | 1 mL | M356801 | 108 |
| **M3569** | Monoclonal Mouse Anti-Human Progesterone Receptor, Clone PgR 636 | 0.2 mL<br>1 mL | M356929<br>M356901 | 108 |
| **M3571** | Monoclonal Mouse Anti-Human CD1a, Clone 010 | 1 mL | M357101 | 77 |
| **M3575** | Monoclonal Mouse Anti-Thyroid Transcription Factor, Clone 8G7G3/1 | 0.2 mL<br>1 mL | M357529<br>M357501 | 112 |
| **M3601** | Monoclonal Mouse Anti-Human CD99, MIC2 Gene Products, Ewing's Sarcoma Marker, Clone 12E7 | 1 mL | M360101 | 84 |
| **M3609** | Monoclonal Mouse Anti-Human Inhibin α, Clone R1 | 1 mL | M360901 | 97 |

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| **M3612** | Monoclonal Mouse Anti-Human E-Cadherin, Clone NCH-38 | 0.2 mL<br>1 mL | M361229<br>M361201 | 90 |
| **M3613** | Monoclonal Mouse Anti-Human N-Cadherin, Clone 6G11 | 1 mL | M361301 | 104 |
| **M3614** | Monoclonal Mouse Anti-Human Thymidylate Synthase, Clone TS106 | 1 mL | M361401 | 111 |
| **M3615** | Monoclonal Mouse Anti-Human Prostein, Clone 10E3 | 0.2 mL<br>1 mL | M361529<br>M361501 | 109 |
| **M3616** | Monoclonal Rabbit Anti-Human AMACR, Clone 13H4 | 0.2 mL<br>1 mL | M361629<br>M361601 | 74 |
| **M3617** | Monoclonal Mouse Anti-Human COX-2, Clone CX-294 | 1 mL | M361701 | 87 |
| **M3619** | Monoclonal Mouse Anti-Human Podoplanin, Clone D2-40 | 0.2 mL<br>1 mL | M361929<br>M361901 | 107 |
| **M3620** | Monoclonal Mouse Anti-Human Prostate-Specific Membrane Antigen, Clone 3E6 | 0.2 mL<br>1 mL | M362029<br>M362001 | 109 |
| **M3621** | Monoclonal Mouse Anti-Human MITF, Clone D5 | 0.2 mL | M362129 | 101 |
| **M3623** | Monoclonal Mouse Anti-Human Tyrosinase, Clone T311 | 0.2 mL | M362329 | 112 |
| **M3624** | Monoclonal Mouse Anti-Human Survivin, Clone 12C4 | 0.2 mL | M362429 | 110 |
| **M3625** | Monoclonal Mouse Anti-Human Mammaglobin, Clone 304-1A5 | 0.2 mL | M362529 | 100 |
| **M3626** | Monoclonal Mouse Anti-Human IMP3, Clone 69.1 | 0.2 mL | M362629 | 97 |
| **M3627** | Monoclonal Mouse Anti-Human PTEN, Clone 6H2.1 | 0.2 mL | M362729 | 109 |
| **M3628** | Monoclonal Rabbit Anti-Human Akt-pS473, Phosphorylation Site Specific, Clone 14-5 | 1 mL | M362801 | 73 |
| **M3629** | Monoclonal Rabbit Anti-Human p53 Protein, Clone 318-6-11 | 0.2 mL<br>1 mL | M362929<br>M362901 | 106 |
| **M3631** | Monoclonal Mouse Anti-Human CD15, Clone Carb-3 | 0.2 mL<br>1 mL | M363129<br>M363101 | 80 |
| **M3632** | Monoclonal Mouse Anti-Human Renal Cell Carcinoma Marker, Clone SPM314 | 1 mL | M363201 | 109 |
| **M3636** | Monoclonal Mouse Anti-Human CDX2, Clone DAK-CDX2 | 0.2 mL<br>1 mL | M363629<br>M363601 | 86 |
| **M3637** | Monoclonal Mouse Anti-Villin, Clone 1D2 C3 | 1 mL | M363701 | 113 |
| **M3638** | Monoclonal Mouse Anti-Human Gross Cystic Disease Fluid Protein-15, Clone 23A3 | 1 mL | M363801 | 95 |
| **M3639** | Monoclonal Mouse Anti-Human MutS Protein Homolog 2, Clone FE11 | 0.2 mL<br>1 mL | M363929<br>M363901 | 102 |
| **M3640** | Monoclonal Mouse Anti-Human MutL Protein Homolog 1, Clone ES05 | 0.2 mL<br>1 mL | M364029<br>M364001 | 102 |
| **M3641** | Monoclonal Mouse Anti-Human CD5, Clone 4C7 | 1 mL | M364101 | 78 |
| **M3642** | Monoclonal Rabbit Anti-Human Cyclin D1, Clone EP12 | 1 mL | M364201 | 87 |
| **M3646** | Monoclonal Rabbit Anti-Human MutS Protein Homolog 6, Clone EP49 | 0.2 mL<br>1 mL | M364629<br>M364601 | 103 |
| **M3647** | Monoclonal Rabbit Anti-Human Postmeiotic Segregration Increased 2, Clone EP51 | 0.2 mL<br>1 mL | M364729<br>M364701 | 107 |
| **M3648** | Monoclonal Mouse Anti-Human ERCC1, Clone 4F9 | 0.2 mL<br>1 mL | M364829<br>M364801 | 92 |
| **M3649** | Monoclonal Mouse Anti-Human Octamer-Binding Transcription Factor 3/4, Clone N1NK | 0.2 mL<br>1 mL | M364929<br>M364901 | 105 |
| **M3651** | Monoclonal Rabbit Anti-Human Terminal Deoxynucleotidyl Transferase (TdT), Clone EP266 | 1 mL | M365101 | 111 |
| **M3652** | Monoclonal Rabbit Anti-Human Cytokeratin 8/18, Clone EP17/EP30 | 1 mL | M365201 | 88 |
| **M7001** | Monoclonal Mouse Anti-Human p53 Protein, Clone DO-7 | 0.2 mL<br>1 mL | M700129<br>M700101 | 106 |
| **M7002** | Monoclonal Mouse Anti-Human Cytokeratin 10, Clone DE-K10 | 1 mL | M700201 | 88 |
| **M7003** | Monoclonal Mouse Anti-Human Cytokeratin 10/13, Clone DE-K13 | 1 mL | M700301 | 88 |
| **M7010** | Monoclonal Mouse Anti-Human Cytokeratin 18, Clone DC 10 | 0.2 mL | M701029 | 89 |
| **M7018** | Monoclonal Mouse Anti-Human Cytokeratin 7, Clone OV-TL 12/30 | 0.2 mL<br>1 mL | M701829<br>M701801 | 88 |
| **M7019** | Monoclonal Mouse Anti-Human Cytokeratin 20, Clone $K_s$20.8 | 0.2 mL<br>1 mL | M701929<br>M701901 | 89 |
| **M7020** | Monoclonal Mouse Anti-Vimentin, Clone Vim 3B4 | 1 mL | M702001 | 114 |
| **M7046** | Monoclonal Mouse Anti-Cytokeratin 17, Clone E3 | 1 mL | M704601 | 89 |
| **M7050** | Monoclonal Mouse Anti-Human CD79α, Clone JCB117 | 0.2 mL<br>1 mL | M705029<br>M705001 | 84 |
| **M7052** | Monoclonal Mouse Anti-Human Mast Cell Tryptase, Clone AA1 | 0.2 mL | M705229 | 100 |
| **M7064** | Monoclonal Mouse Anti-Enterovirus, Clone 5-D8/1 | 1 mL | M706401 | 91 |
| **M7072** | Monoclonal Mouse Anti-Human Carcinoembryonic Antigen, Clone II-7 | 0.2 mL<br>1 mL | M707229<br>M707201 | 77 |

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| Code | Product | Package Size | Order No. | Page |
|---|---|---|---|---|
| **M7077** | Monoclonal Mouse Anti-Human Plasma Cell, Clone VS38c | 1 mL | M707701 | 107 |
| **M7082** | Monoclonal Mouse Anti-Human CD44, Phagocytic Glycoprotein-1, Clone DF1485 | 1 mL | M708201 | 82 |
| **M7103** | Monoclonal Mouse Anti-Human CD8, Clone C8/144B | 1 mL | M710301 | 79 |
| **M7157** | Monoclonal Mouse Anti-Human Follicular Dendritic Cell, Clone CNA.42 | 1 mL | M715701 | 94 |
| **M7158** | Monoclonal Mouse Anti-Human Hepatocyte, Clone OCH1E5 | 1 mL | M715801 | 95 |
| **M7165** | Monoclonal Mouse Anti-Human CD34 Class II, Clone QBEnd 10 | 0.2 mL<br>1 mL | M716529<br>M716501 | 82 |
| **M7186** | Monoclonal Mouse Anti-Human Topoisomerase IIα, Clone Ki-S1 | 1 mL | M718601 | 112 |
| **M7191** | Monoclonal Mouse Anti-Human Placental Alkaline Phosphatase, Clone 8A9 | 0.2 mL<br>1 mL | M719129<br>M719101 | 107 |
| **M7195** | Monoclonal Mouse Anti-Human CD246, ALK Protein, Clone ALK1 | 0.2 mL<br>1 mL | M719529<br>M719501 | 86 |
| **M7196** | Monoclonal Mouse Anti-Human Melan-A, Clone A103 | 0.2 mL<br>1 mL | M719629<br>M719601 | 100 |
| **M7202** | Monoclonal Mouse Anti-Human $p21^{WAF1/Cip1}$, Clone SX118 | 0.2 mL | M720229 | 106 |
| **M7203** | Monoclonal Mouse Anti-Human $p27^{Kip1}$, Clone SX53G8 | 1 mL | M720301 | 106 |
| **M7211** | Monoclonal Mouse Anti-Human BCL6 Protein, Clone PG-B6p | 0.2 mL<br>1 mL | M721129<br>M721101 | 75 |
| **M7228** | Monoclonal Mouse Anti-Human CD138, Clone MI15 | 1 mL | M722801 | 85 |
| **M7235** | Monoclonal Mouse Anti-Human Granzyme B, Clone GrB-7 | 1 mL | M723501 | 94 |
| **M7237** | Monoclonal Mouse Anti-Human Cytokeratin 5/6, Clone D5/16 B4 | 0.2 mL<br>1 mL | M723729<br>M723701 | 88 |
| **M7240** | Monoclonal Mouse Anti-Human Ki-67 Antigen, Clone MIB-1 | 0.2 mL<br>1 mL | M724029<br>M724001 | 98 |
| **M7245** | Monoclonal Mouse Anti-Human Calretinin, Clone DAK-Calret 1 | 0.2 mL<br>1 mL | M724529<br>M724501 | 77 |
| **M7248** | Monoclonal Mouse Anti-Rat Ki-67 Antigen, Clone MIB-5 | 1 mL | M724801 | 98 |
| **M7254** | Monoclonal Mouse Anti-Human CD3, Clone F7.2.38 | 0.2 mL<br>1 mL | M725429<br>M725401 | 78 |
| **M7255** | Monoclonal Mouse Anti-Human CD7, Clone CBC.37 | 1 mL | M725501 | 79 |
| **M7257** | Monoclonal Mouse Anti-Human Thyroid Peroxidase, Clone MoAb47 | 0.2 mL | M725729 | 112 |
| **M7259** | Monoclonal Mouse Anti-Human MUM1 Protein, Clone MUM1p | 0.2 mL<br>1 mL | M725929<br>M725901 | 102 |
| **M7260** | Monoclonal Mouse Anti-Human BCL10 Protein, Clone 151 | 0.2 mL | M726029 | 75 |
| **M7262** | Monoclonal Mouse Anti-Human Laminin-5, Gamma-2 Chain, Clone 4G1 | 1 mL | M726201 | 99 |
| **M7263** | Monoclonal Mouse Anti-Human MCM3 Protein, Clone 101 | 0.2 mL | M726329 | 100 |
| **M7271** | Monoclonal Mouse Anti-Human CD57, Clone TB01 | 0.2 mL | M727129 | 83 |
| **M7273** | Monoclonal Mouse Anti-Human Vascular Endothelial Growth Factor, Clone VG1 | 0.2 mL | M727329 | 113 |
| **M7279** | Monoclonal Mouse Anti-Human LAT Protein, Clone LAT-1 | 0.2 mL | M727929 | 99 |
| **M7292** | Monoclonal Mouse Anti-Human Estrogen Receptor β1, Clone PPG5/10 | 1 mL | M729201 | 93 |
| **M7293** | Monoclonal Mouse Anti-Human Tissue Inhibitor of Metalloproteinases 1, Clone VT7 | 0.2 mL | M729329 | 112 |
| **M7294** | Monoclonal Mouse Anti-Human uPAR, Clone R4 | 0.2 mL | M729429 | 113 |
| **M7296** | Monoclonal Mouse Anti-Human CD19, Clone LE-CD19 | 0.2 mL | M729629 | 80 |
| **M7297** | Monoclonal Mouse Anti-Human HER3, Clone DAK-H3-IC | 0.2 mL | M729729 | 95 |
| **M7298** | Monoclonal Mouse Anti-Human Wild-Type EGFR, Clone DAK-H1-WT | 0.2 mL | M729829 | 91 |
| **M7299** | Monoclonal Mouse Anti-Human EGFR-pY1197, Phosphorylation Site Specific, Clone DAK-H1-1197 | 0.2 mL | M729929 | 91 |
| **M7300** | Monoclonal Mouse Anti-Human Ribosomal Protein S6-pS240, Phosphorylation Site Specific, Clone DAK-S6-240 | 0.2 mL | M730029 | 110 |
| **M7303** | Monoclonal Mouse Anti-Human ZAP-70, Clone 2F3.2 | 1 mL | M730301 | 114 |
| **M7304** | Monoclonal Mouse Anti-Human CD56, Clone 123C3 | 0.2 mL<br>1 mL | M730429<br>M730401 | 83 |
| **M7305** | Monoclonal Mouse Anti-Human Nucleophosmin, Clone 376 | 1 mL | M730501 | 105 |
| **M7307** | Monoclonal Mouse Anti-Human B-Cell-Specific Activator Protein, Clone DAK-Pax5 | 1 mL | M730701 | 74 |
| **M7308** | Monoclonal Mouse Anti-Human CD10, Clone 56C6 | 0.2 mL<br>1 mL | M730829<br>M730801 | 79 |
| **M7309** | Monoclonal Mouse Anti-Human CD2, Clone AB75 | 1 mL | M730901 | 78 |
| **M7310** | Monoclonal Mouse Anti-Human CD4, Clone 4B12 | 0.2 mL<br>1 mL | M731029<br>M731001 | 78 |
| **M7312** | Monoclonal Mouse Anti-Human CD23, Clone DAK-CD23 | 1 mL | M731201 | 81 |

# Product Code Index (continued)

| Code | Product | Package Size | Order No. | Page |
|---|---|---|---|---|
| **M7313** | Monoclonal Mouse Anti-Human MUC2, Clone CCP58 | 0.2 mL<br>1 mL | M731329<br>M731301 | 101 |
| **M7314** | Monoclonal Rabbit Anti-Human ERG, Clone EP111 | 0.2 mL<br>1 mL | M731429<br>M731401 | 92 |
| **M7315** | Monoclonal Mosue Anti-Human Synaptophysin, Clone DAK-SYNAP | 0.2 mL<br>1 ml | M731529<br>M731501 | 110 |
| **M7316** | Monoclonal Mouse Anti-Human MUC5AC, Clone CLH2 | 0.2 mL<br>1 mL | M731629<br>M731601 | 102 |
| **P** | | | | |
| **P0141** | Polyclonal Rabbit Anti-Guinea Pig Immunoglobulins/HRP | 2 mL | P014102 | 119 |
| **P0160** | Polyclonal Rabbit Anti-Goat Immunoglobulins/HRP | 2 mL | P016002 | 119 |
| **P0161** | Polyclonal Rabbit Anti-Mouse Immunoglobulins/HRP | 2 mL | P016102 | 119 |
| **P0163** | Polyclonal Rabbit Anti-Sheep Immunoglobulins/HRP | 2 mL | P016302 | 120 |
| **P0212** | Polyclonal Rabbit Anti-Human IgA, IgG, IgM, Kappa, Lambda/HRP | 2 mL | P021202 | 96 117 |
| **P0214** | Polyclonal Rabbit Anti-Human IgG/HRP | 2 mL | P021402 | 96 117 |
| **P0215** | Polyclonal Rabbit Anti-Human IgM/HRP | 2 mL | P021502 | 97 117 |
| **P0217** | Polyclonal Swine Anti-Rabbit Immunoglobulins/HRP | 2 mL | P021702 | 120 |
| **P0260** | Polyclonal Rabbit Anti-Mouse Immunoglobulins/HRP | 2 mL | P026002 | 119 |
| **P0397** | Streptavidin/HRP | 1 mL | P039701 | 132 |
| **P0399** | Polyclonal Swine Anti-Rabbit Immunoglobulins/HRP | 1 mL | P039901 | 120 |
| **P0447** | Polyclonal Goat Anti-Mouse Immunoglobulins/HRP | 1 mL | P044701 | 119 |
| **P0448** | Polyclonal Goat Anti-Rabbit Immunoglobulins/HRP | 1 mL | P044801 | 119 |
| **P0449** | Polyclonal Rabbit Anti-Goat Immunoglobulins/HRP | 1 mL | P044901 | 119 |
| **P0450** | Polyclonal Rabbit Anti-Rat Immunoglobulins/HRP | 1 mL | P045001 | 120 |
| **P5100** | Polyclonal Rabbit Anti-FITC/HRP, Rabbit F(Ab') | 0.5 mL | P510050 | 171 |
| **PT102** | PT Link Tank | 1 unit | PT10230 | 37 |
| **PT103** | PT Link Tank Cover | 1 unit | PT10330 | 37 |
| **PT109** | PT Link Rinse Station | 1 container and lid | PT10930 | 37 |
| **PT200** | PT Link | 1 unit | PT20027 | 37 |
| **PT202** | PT Link Tank | 1 unit | PT20230 | 37 |
| **PT203** | PT Link Tank Cover | 1 unit | PT20330 | 37 |
| **S** | | | | |
| **S0809** | Antibody Diluent | 50 mL<br>125 mL | S080981<br>S080983 | 133 |
| **S1699** | Target Retrieval Solution, Concentrated x 10 | 500 mL | S169984 | 134 |
| **S1700** | Target Retrieval Solution | 500 mL | S170084 | 134 |
| **S1801** | Hybridization Solution, Nucleic Acid Blotting | 250 mL | S180130 | 178 |
| **S1803** | Stringent Wash (2x SSC), Nucleic Acid Blotting | Pkg of 5 | S180330 | 178 |
| **S1961** | DAB Enhancer | 30 mL<br>110 mL | S196130<br>S196131 | 133 |
| **S1962** | Methyl Green, Counterstain | 500 mL | S196230 | 134 |
| **S1964** | Ultramount, Aqueous Permanent Mounting Medium, Ready-to-Use | 15 mL | S196430 | 135 |
| **S1966** | Tween 20 | 100 mL | S196630 | 134 |
| **S1967** | DAB Away® | 50 tests | S196730 | 54 |
| **S1968** | Tris-Buffered Saline (TBS), pH 7.6 | 2 x 5 L | S196830 | 134 |
| **S2002** | Dako Pen | 1 unit | S200230 | 135 |
| **S2003** | Dual Endogenous Enzyme Block | 15 mL<br>10 x 11 mL△ | S200380<br>S200389 | 54 134 |
| **S2367** | Dako Target Retrieval Solution, pH 9 (x 10) | 500 mL | S236784 | 134 |
| **S2368** | Dako Target Retrieval Solution, pH 9, Ready-to-Use | 500 mL | S236884 | 134 |
| **S2369** | Dako Target Retrieval Solution, Citrate pH 6 (x 10) | 500 mL | S236984 | 134 |
| **S2375** | Dako Target Retrieval Solution, pH 9 (10x), (3-in-1) | 500 mL | S237584 | 134 |
| **S2450** | Hybridizer (110-120 V) | 1 unit | S245030 | 166 |
| **S2451** | Hybridizer (200-240 V) | 1 unit | S245130 | 166 |

△ Packaged in vials for use with Dako Autostainer instruments

# Product Code Index (continued)

| Code | Product | Package Size | Order No. | Page |
|---|---|---|---|---|
| **S2452** | Hybridizer Humidity Control Strips | 20 strips | S245230 | 166 |
| **S2700** | Label Printer (Dako Autostainer Plus) | 1 unit | S270030 | 136 |
| **S2801** | Pascal Quality Strips | 100 strips | S280130 | 135 |
| **S3001** | Tris-Buffered Saline (TBS) | 6 x 1 L | S300130 | 134 |
| **S3002** | Pepsin | 6 x 2 g | S300230 | 135 |
| **S3003** | Silanized Slides | 100 slides | S300330 | 135 |
| **S3004** | Proteinase K (Concentrate) | 2 mL | S300402 | 135 |
| **S3006** | Dako Wash Buffer 10x | 1 L | S300685 | 54 134 |
| **S3007** | Proteolytic Enzyme, Ready-to-Use | 10 x 11 mL△ | S300789 | 54 135 |
| **S3020** | Proteinase K, Ready-to-Use | 150 tests, 15 mL<br>1100 tests, 110 mL<br>1100 tests, 10 x 11 mL△ | S302080<br>S302030<br>S302089 | 54 135 |
| **S3022** | Antibody Diluent with Background-Reducing Components | 50 mL<br>125 mL | S302281<br>S302283 | 133 |
| **S3023** | Fluorescence Mounting Medium | 15 mL | S302380 | 135 |
| **S3024** | Phosphate-Buffered Saline (PBS), pH 7.0 | 6 x 1 L | S302430 | 134 |
| **S3025** | Faramount, Aqueous Mounting Medium, Ready-to-Use | 15 mL | S302580 | 135 |
| **S3301** | Hematoxylin, for the Dako Autostainer | 500 mL | S330130 | 54 145 147 149 |
| **S3302** | Hematoxylin | 500 mL | S330230 | 134 |
| **S3306** | Tris-Buffered NaCl Solution with Tween 20 (TBST), pH 7.6, Concentrated x 10 | 500 mL | S330630 | 134 |
| **S3309** | Hematoxylin, Mayer's | 500 mL | S330930 | 134 |
| **S3380** | Slide Labels, Square Flap | 500 labels | S338030 | 137 |
| **S3386** | Slide Labels, Large Flap | 500 labels | S338630 | 137 |
| **S3393** | Slide Labels, Small Flap | 500 labels | S339330 | 137 |
| **S3417** | Slide Label Kit, Large Flap | 3000 labels | S341730 | 137 |
| **S3424** | Dako Autostainer Reagent Racks | 2 racks | S342430 | 54 |
| **S3425** | Dako Autostainer Reagent Vials | 100 vials | S342530 | 54 |
| **S3704** | Autostainer Slide Racks | 4 racks | S370430 | 54 |
| **SK001** | HercepTest for Automated Link Platforms | 50 tests | SK00121 | 38 148 |
| **SK005** | PD-L1 IHC 28-8 pharmDx | 50 tests | SK00521 | 39 158 |
| **SK006** | PD-L1 IHC 22C3 pharmDx | 50 tests | SK00621 | 39 155 |
| **SK109** | *HER2* CISH pharmDx Kit | 20 tests | SK10911 | 154 170 |
| **SK110** | EnVision DuoFLEX Doublestain System (Link) | 100-150 tests, 30 mL | SK11021 | 53 130 |
| **SK200** | User-Fillable Reagent Bottles, 5 mL Capacity (Link) | 5 mL | SK20005 | 36 |
| **SK201** | User-Fillable Reagent Bottles, 12 mL Capacity (Link) | 12 mL | SK20110 | 36 |
| **SK202** | User-Fillable Reagent Bottles, 25 mL Capacity (Link) | 25 mL | SK20225 | 36 |
| **SK203** | User-Fillable Bottles, 50 mL Capacity (Link) | 50 mL | SK20365 | 36 |
| **SK301** | Instrument Cleaning Kit (Link) | 18 runs | SK30190 | 36 |
| **SK308** | Hematoxylin (Link) | 45 mL | SK30881 | 36 147 149 |
| **SK310** | ER/PR pharmDx Kit (Link) | 50 tests | SK31090 | 38 146 |
| **SL002** | Clear-It Cleaning Reagent for Dako Autostainer | 3.8 L | SL00230 | 54 |

## X

| | | | | |
|---|---|---|---|---|
| **X0590** | Biotin Blocking System | 15 mL + 15 mL | X059030 | 134 |
| **X0901** | Swine Serum (Normal) | 10 mL | X090110 | 121 |
| **X0902** | Rabbit Serum (Normal) | 10 mL | X090210 | 121 |
| **X0903** | Negative Control, Rabbit Immunoglobulin Fraction (Normal) | 2 mL<br>10 mL | X090302<br>X090310 | 121 |
| **X0907** | Goat Serum (Normal) | 10 mL | X090710 | 121 |
| **X0909** | Protein Block, Serum Free | 110 mL | X090930 | 134 |
| **X0931** | Control Reagent, Mouse IgG1 | 1 mL | X093101 | 121 |
| **X0936** | Negative Control, Rabbit Immunoglobulin Fraction (Solid-Phase Absorbed) | 2 mL | X093602 | 121 |
| **X0942** | Control Reagent, Mouse IgM | 1 mL | X094201 | 121 |
| **X0943** | Control Reagent, Mouse IgG2a | 1 mL | X094301 | 121 |

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| Code | Product | Package Size | Order No. | Page |
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| **X0944** | Control Reagent, Mouse IgG2b | 1 mL | X094401 | 121 |
| **X3021** | Levamisole Solution | 15 mL | X302130 | 134 |
| **Y** | | | | |
| **Y1442** | Fragile X Probe, Fluorescein-Labeled | 0.1 mL | Y144230 | 178 |
| **Y5200** | Epstein-Barr Virus (EBER) PNA Probe/Fluorescein | 40 tests, 1 mL | Y520001 | 177 |
| **Y5406** | *IGH* FISH DNA Probe, Split Signal | 0.2 mL | Y540629 | 173 |
| **Y5407** | *BCL2* FISH DNA Probe, Split Signal | 0.2 mL | Y540729 | 172 |
| **Y5408** | *BCL6* FISH DNA Probe, Split Signal | 0.2 mL | Y540829 | 172 |
| **Y5409** | *MALT1* FISH DNA Probe, Split Signal | 0.2 mL | Y540929 | 173 |
| **Y5410** | *MYC* FISH DNA Probe, Split Signal | 0.2 mL | Y541029 | 174 |
| **Y5414** | *CCND1* FISH DNA Probe, Split Signal | 0.2 mL | Y541429 | 173 |
| **Y5417** | *ALK* FISH DNA Probe, Split Signal | 0.2 mL | Y541729 | 172 |
| **Z** | | | | |
| **Z0097** | Polyclonal Rabbit Anti-Laminin | 1 mL | Z009701 | 99 |
| **Z0196** | Polyclonal Swine Anti-Rabbit Immunoglobulins | 2 mL | Z019602 | 120 |
| **Z0259** | Polyclonal Rabbit Anti-Mouse Immunoglobulins | 2 mL | Z025902 | 119 |
| **Z0311** | Polyclonal Rabbit Anti-S100 | 0.2 mL<br>1 mL | Z031129<br>Z031101 | 110 |
| **Z0334** | Polyclonal Rabbit Anti-Glial Fibrillary Acidic Protein | 0.2 mL<br>1 mL | Z033429<br>Z033401 | 94 117 |
| **Z0420** | Polyclonal Goat Anti-Mouse Immunoglobulins | 1 mL | Z042001 | 119 |
| **Z0622** | Polyclonal Rabbit Anti-Cytokeratin, Wide Spectrum Screening | 1 mL | Z062201 | 90 |
| **Z5116** | Polyclonal Rabbit Anti-PGP 9.5 | 1 mL | Z511601 | 107 |

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- **Technical Inquiries**
  Contact Technical Support Group by phone 800 235 5763, Option 2, fax 805 566 3746 or e-mail: techsupport@agilent.com.
- **Literature Requests**
  To request literature please visit www.dako.com under Knowledge Center or e-mail: litreqUS@dako.com
- **Corporate Offices**
  General Information by phone
  800 235 5743, or fax 805 566 1344.
- **Accounting Department**
  Contact Accounting Department by phone
  866 653 5280, or fax 800 417 9228

## Ordering Information

- **Fast Delivery**
  Due to the nature of our products, most orders accepted in our system before 2 PM PST Monday-Friday will be shipped same day for second day or overnight delivery. Some products may not be eligible for shipments on Fridays or subject to manufacturing lead times.
- **Standing Orders**
  For your convenience, Dako will schedule periodic shipments against any single firm purchase order. This service eliminates the burden of placing frequent repeat orders and assures a constant supply of regularly needed products. Standing orders can be cancelled, increased or decreased up to 48 hours prior to scheduled shipment date.
- **Confirming Orders**
  In case a phone order is followed by written confirmation, please mark confirming orders very clearly to avoid duplication in shipment.
- **Prices**
  Subject to change without notice.
- **Sales Tax**
  Where applicable there will be a sales/use tax.
  Tax Exempt Certificates can be submitted to dako.ustrantax@agilent.com
- **Payment Terms**
  Payment shall be net 30 days from date of invoice upon approved credit. Prepaid and credit card orders are accepted. We take Visa, Mastercard, and American Express. Overdue amounts are subjected to carrying interest rate charges at 2% per month
- **Shipping Terms**
  Dako ships DDP (Delivered Duty Paid).
- **Product Safety**
  The products offered by Dako are intended for use by professionals who will handle the products and their disposal with all due safety precautions. Material Safety Data Sheets are available for all applicable Dako products. Please direct all safety inquiries to the Safety Department at 800 400 3256, extension 5535, or fax 805 566 1344.
- **Warranties**
  Dako warrants that its products will be of merchantable quality and will conform to the information contained in this catalog and in the relevant Dako specifications and product brochures. Dako makes no warranties for the products' suitability for any purchaser's particular use of the products. The suitability for use must be determined by the purchaser or user of the products. Product liability is limited to refunds or replacements. Product performance is guaranteed up to the expiration date of the product.

  Customers must notify Dako within 30 business days of receipt of the product of any defects in the product (excluding damages in shipment) in order to request a credit or a replacement product. For Dako Autostainer warranty please refer to the Dako Autostainer page.
- **Technical Backup**
  Do you have a question or a concern? Please call! Our expert support specialists are here to help. Call our toll-free number 800 235 5763, Option 2.
- **Returns**
  Should you need to return an item, please call Customer Service at 800 235 5763 to request a return authorization number within 30 days of receipt of the product. Returns without an RMA number will not be accepted. No credit or exchanges will be permitted without prior authorization.

  In order to maintain the high quality and integrity of our products, we do not put returned products back into inventory to ship to other customers. Therefore, it is very rare when we are able to accept returns or issue approved return authorizations. We do however recognize that errors do occur and we will work with each customer on a case by case basis to determine the best methods to accommodate such occurrences. If you order a product in error and plan to return for credit or replacement, please note that there will be a 25% return goods fee. Original freight charges will not be credited. No returns for service parts will be accepted.

  We do not accept material that has been opened, not in the original packaging, packaging that has been marked on, or with an expiration date within 4 months.

  For Returns related to performance, contact the Technical Support Group at 800 424 0021. All performance claims are subject to confirmation by in-house testing at Dako.

  The RMA number must clearly appear on the outer return packaging.
- **International Inquiries**
  Dako has a global distribution network to respond to all customers' inquiries and provide service and support. Please refer to Dako Sales Offices and Distributors list in the catalog for specifics.

# Trusted Answers. Together

**Agilent** Pathology Solutions

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Carpinteria, CA 93013, USA

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Technical Support: 800 424 0021
OEM: 877 636 3256

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Distributors in more than 100 countries