

Product Catalogue

March 2017

© BioAustralis 2017

Table of Contents

Introduction	1
Distributors	3
Product List	5
Analogue Sets	7
Products	17
Index of Product Names & Synonyms	147



Introduction

BioAustralis is a specialist manufacturer and supplier of microbial metabolites for *in vitro* laboratory use. Our expertise in early recognition profiling of metabolites from a broad diversity of fungi, actinomycetes and other bacterial genera places BioAustralis in a unique position to provide many rare and unusual microbial metabolites. For more than half our products, BioAustralis is first to market. We offer our products to other leading fine chemical retailers and direct to researchers.

Our particular interest is producing rare metabolites. Some metabolites are reported only once in the literature and then are lost to science. Many offer the promise of new pharmacology and modes of action. Today, in a world with rampant resistance across the chemotherapeutic spectrum, these "lost antibiotics" represent an unrealised avenue to sustain the need for genuinely novel antibacterials, antifungals, antitumor and antiprotozoan actives.

Our 2017 catalogue adds over 100 metabolites. We continue themes from previous catalogues, with the addition of several **rare antibiotics** (gliorosein, phanerosporic acid, spirolaxine), **antifungals** (aspochracin, JBIR-15, palitantin, and PF1163-A and B) and **antitumor actives** (andrastin A, chaetomin, cordycepin, duclauxin, eupenifeldin, illudin M and spirohexenolide A), together with an interesting selection of other therapeutic classes, amauromine (**vasodilator**), adipostatin (**glycerol-3-phosphate dehydrogenase inhibitor**), elasnin (**elastase inhibitor**), benzomalvins A, B and C (inhibitors of **Substance P** and **indoleamine 2,3-dioxygenase**).

Recognising the increasing precision in identifying novel taxa, we have added secondary metabolites that are important **chemo-taxonomic markers** for the rapid identification of fungal species, e.g. aspochracin, asterriquinol D dimethylether, citreoindole, chevalones, fulvic acid, 14-hydroxypaspalinine, isokotanin, kotanin, kumbicin C, petromurin, neohydroxyaspergillic acid and sartorypyrones. In parallel, we now offer metabolites that play an essential role in the species chemotaxonomy of lichens - diffractaic acid, evernic acid, fumarprotocetraric acid, lecanoric acid, lobaric acid, psoromic acid, stictic acid and vulpinic acid.

The concept and use of known actives as **dereplication standards** in discovery is well established. What is not always recognised is that extracts may contain high concentrations of small, often polar, **"house-keeping" molecules** which exhibit weak but readily detectable activity in many bioassays. Failure to recognise their role can divert attention from important rare and novel actives.

BioAustralis has selected some of the more interesting house-keeping metabolites that are commonly encountered in microbial extracts – flavanoids (genistein, daidzein and biochanin A), salicylates (methylsalicylic acid, orsellinic acid and ester analogues), diketopiperazines (cyclo(L-Tyr-L-Val), cyclo(L-Phe-L-Val), cyclo(L-Phe-L-Pro), cyclo(L-Leu-L-Trp), cyclo(L-Phe-L-Pro) and others), lignin degradation products (caffeic acid, cinnamic acids, coumaric acid, ferulic acid, isoferulic acid, sinapic acid and urocanic acid), biogenic amine derivatives (N-acetylhistamine, N-acetyltryptamine, and N-acetyltyraminept), quinones (fumigatin methylether, juglone) and simple anthracylines (emodin).

The new range of metabolites adds diverse and unusual structures which add to the chemo-diversity of discovery collections for bioassay platforms, the **cyclic hexapeptide**, hirsutide; the **cyclic heptapeptides**, unguisin A and B; the **linear nonproteogenic tripeptide**, padanamide; the **meroterpenoids**, aszonapyrone A, sartorypyrone, chevalone B and C; the dimeric anthrone epoxide, oxanthromicin and a number of structurally complex indole metabolites, aszonalenin, its acetyl analogue, chaetominine, citreoindole and echinulin.

To source a metabolite not in our catalogue or to obtain larger quantities, please contact us at:

BioAustralis Fine Chemicals Building C, 28 – 54 Percival Road Smithfield NSW 2154 AUSTRALIA

Tel: +61 (0)2 9757 4515 Fax: +61 (0)2 9757 2586 Email: <u>info@bioaustralis.com</u>

Distributors

Europe

www.tebu-bio.com



Japan

www.funakoshi.co.jp



China

www.biosun.com.cn



www.chem-strong.com



Korea

www.kimnfriends.co.kr



www.uniscience.co.kr



Taiwan

www.sinwanbio.com



India

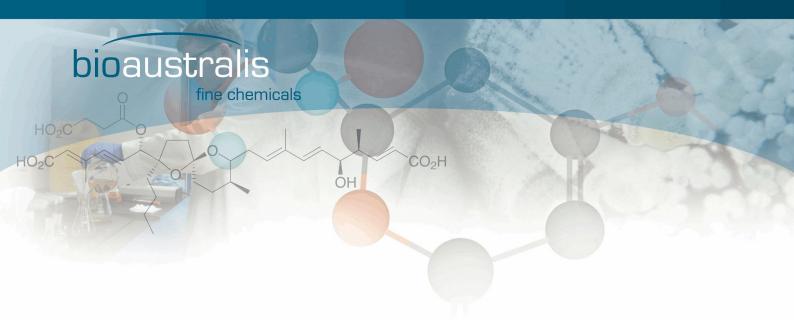
www.karmicbio.com





Product List

March 2017



Analogue Sets

March 2017

Avermectin Analogue Set

Product Description: Research on the avermectin class of nematocides has spanned 35 years with thousands of analogues reported in the patent and scientific literature. The six analogues in the Avermectin Analogue Set represent pivotal commercial advances in the development of this class, with the analogues displaying a range of physico-chemical properties, potencies and spectrum of action as anthelmintics and acaricides. The Avermectin Analogue Set is a useful tool in addressing current research questions on mode of action, species selectivity and cross resistance within this exciting class of macrocyclic lactones.

Code No.: BIA-MS5007

Avermectin B1a

Product	Code No.	CAS #	Mol. Formula	Mol Wt.	Qty
Avermectin B1a	BIA-A1010	65195-55-3	$C_{48}H_{72}O_{14}$	873.1	1mg
Doramectin	BIA-D1301	117704-25-3	C ₅₀ H ₇₄ O ₁₄	899.1	1mg
Emamectin B1a	BIA-E1545	121124-29-6	C ₄₉ H ₇₅ NO ₁₃	886.1	1mg
Eprinomectin B1a	BIA-E1547	133305-88-1	$C_{50}H_{75}NO_{14}$	914.1	1mg
Ivermectin B1a	BIA-I1119	70161-11-4	C ₄₈ H ₇₄ O ₁₄	875.1	1mg
Selamectin	BIA-S1530	220119-17-5	C ₄₃ H ₆₃ NO ₁₁	770.0	1mg

Chloramphenicol Analogue Set

Product Description: Research on chloramphenicol antibiotics has spanned 65 years with thousands of analogues prepared and published in the patent and scientific literature. The nine analogues in the Chloramphenicol Analogue Set represent pivotal advances in the development of the class, with the analogues displaying a range of physico-chemical, potency, spectrum of action and cross-resistance profiles. The Chloramphenicol Analogue Set is a useful tool in addressing current research questions on this important class of antibiotics.

он н	C

Code No.: BIA-MS5009

Chloramphenicol

Product	Code No.	CAS#	Mol. Formula	Mol Wt.	Qty
Chloramphenicol	BIA-C1474	56-75-7	$C_{11}H_{12}CI_{2}N_{2}O_{5}$	323.1	1mg
Azidamfenicol	BIA-A1485	13838-08-9	$C_{11}H_{13}N_5O_5$	295.3	1mg
Bromamphenicol	BIA-B1490	16803-75-1	$C_{11}H_{12}Br_2N_2O_5$	412.0	1mg
Chloramphenicol acetate	BIA-C1476	10318-16-8	$C_{13}H_{14}CI_2N_2O_6$	365.2	1mg
Chloramphenicol palmitate	BIA-C1477	530-43-8	C ₂₇ H ₄₂ Cl ₂ O ₆	561.5	1mg
Chloramphenicol succinate	BIA-P1478	3544-94-3	$C_{15}H_{16}CI_{2}N_{2}O_{8} \\$	423.2	1mg
Corynecin III	BIA-C1482	18048-95-8	$C_{13}H_{18}N_2O_5$	282.3	1mg
Florfenicol	BIA-F1487	73231-34-2	$C_{12}H_{14}CI_2FNO_4S$	358.2	1mg
Thiamphenicol	BIA-T1486	15318-45-3	$C_{12}H_{15}CI_2NO_5S$	356.2	1mg



Chlortetracycline Degradation Set

Product Description: Chlortetracycline is the first tetracycline discovered from nature and has been one of the most important antibiotics in human and animal health for over 60 years. Chlortetracycline is a linear tetracycle which can be degraded under various conditions, such as acidity, alkalinity, heat, oxidation, light and temperature. The degradation products are not biologically inert; rather they are oxidative and isomeric analogues with unique physical and chemical properties that are not well characterised. The Chlortetracycline Degradation Set provides the major degradation products described in the literature as a tool for understanding and monitoring the fate of chlortetracycline in biological systems and on storage.

Product	Code No.	CAS #	Mol. Formula	Mol Wt.	Qty
Chlortetracycline hydrochloride	BIA-C1506	64-72-2	$C_{22}H_{24}CI_{2}N_{2}O_{8}$	515.3	1mg
Anhydrochlortetracycline hydrochloride	BIA-A1552	65490-24-5	$C_{22}H_{22}CI_2N_2O_7$	497.3	1mg
Epianhydrochlortetracycline hydrochloride	BIA-E1346	158018-53-2	$C_{22}H_{22}CI_2N_2O_7$	497.3	1mg
Epichlortetracycline hydrochloride	BIA-E1345	101342-45-4	C22H24Cl2N2O8	515.4	1mg

Erythromycin Analogue Set

Product Description: Research on the erythromycin class of antibiotics has spanned 60 years with tens of thousands of analogues prepared and published in the patent and scientific literature. The eleven analogues in the Erythromycin Analogue Set represent pivotal advances in the development of the erythromycin class. The analogues display a range of physicochemical, potency, spectrum of action and cross-resistance profiles. The Erythromycin Analogue Set is a useful tool in addressing current research questions on antibiotics using the resources accumulated since the discovery of erythromycin in 1952.

H₃C CH₃ ÇI HQ N N°-H CI

Code No.: BIA-MS5031

Chlortetracycline hydrochloride

Code	No	RT	Λ-Ι	м	25	nn	1

Erythromycin A

Product Code No. CAS# Mol. Formula Mol Wt. Qty Erythromycin A BIA-E1311 114-07-8 C₃₇H₆₇NO₁₃ 733.9 1mg Azithromycin BIA-A1312 83905-01-5 $C_{38}H_{72}N_2O_{12}$ 749.0 1mg Clarithromycin BIA-C1313 81103-11-9 748.0 C₃₈H₆₉NO₁₃ 1mg Davercin BIA-E1433 55224-05-0 759.9 $C_{38}H_{65}NO_{14}$ 1mg Dirithromycin BIA-D1314 62013-04-1 $C_{42}H_{78}N_2O_{14}$ 835.1 1ma Erythromycin A oxime BIA-E1381 111321-02-9 C₃₇H₆₇NO₁₄ 749.9 1mg Lexithromycin BIA-L1519 53066-26-5 $C_{38}H_{70}N_2O_{13}$ 763.0 1ma Roxithromycin BIA-R1315 $C_{41}H_{76}N_2O_{15}$ 837.1 80214-83-1 1ma Telithromycin BIA-T1316 191114-48-4 $C_{43}H_{65}N_5O_{10}$ 812.0 1mg Tulathromycin BIA-T1370 217500-96-4 C₄₁H₇₉N₃O₁₂ 806.1 1mg



Erythromycin Degradation Set

Product Description: Erythromycin A is a structurally complex macrocyclic lactone which can be degraded by acidity, alkalinity, heat, oxidation, light and temperature. In vivo, erythromycin A may also undergo enzymic conversions via hydrolysis, oxidation, derivatisation and coupling. The degradation products are not biologically inert; rather, they offer new structures with unique physical and chemical properties that are often poorly understood. The Erythromycin Degradation Set provides the major degradation products described in the literature as a tool for understanding the complexity of erythromycin degradation in both in vivo and ex vivo systems.

Code No.: BIA-MS5003

Product	Code No.	CAS#	Mol. Formula	Mol Wt.	Qty
Erythromycin A	BIA-E1311	114-07-8	$C_{37}H_{67}NO_{13}$	733.9	1mg
Anhydroerythromycin A	BIA-A1348	23893-13-2	$C_{37}H_{65}NO_{12}$	715.9	1mg
Erythromycin A enol ether	BIA-E1347	33396-29-1	C ₃₇ H ₆₅ NO ₁₂	715.9	1mg
Erythromycin A N-oxide	BIA-E1539	992-65-4	C ₃₇ H ₆₇ NO ₁₄	749.9	1mg
Pseudoerythromycin A enol ether	BIA-P1349	105882-69-7	C37H65NO12	715.9	1ma

Erythromycin Metabolite Set

Product Description: Erythromycin A is the major analogue of a complex of closely related analogues produced by Saccharopolyspora erythraea to become the first macrocyclic lactone antibiotic. Metabolite complexes are common in microbial fermentations and provide an ecological advantage to the microbe in a hostile and bio-diverse environment via differing physico-chemical properties and spectra of action. The Erythromycin Metabolite Set includes the major co-metabolite analogues of erythromycin described in the literature and provides a tool for understanding the pharmacological potential in nature's design of the erythromycin family.

Product	Code No.	CAS #	Mol. Formula	Mol Wt.	Qty
Erythromycin A	BIA-E1311	114-07-8	C ₃₇ H ₆₇ NO ₁₃	733.9	1mg
N-Demethylerythromycin A	BIA-D1352	992-62-1	$C_{36}H_{65}NO_{13}$	719.9	1mg
Erythromycin A N-oxide	BIA-E1539	992-65-4	$C_{37}H_{67}NO_{14}$	749.9	1mg
Erythromycin B	BIA-E1350	527-75-3	C ₃₇ H ₆₇ NO ₁₂	717.9	1mg
Erythromycin C	BIA-E1351	1675-02-1	C ₃₆ H ₆₅ NO ₁₃	719.9	1mg



Leucomycin Complex Set

Product Description: Leucomycin, discovered in 1953, is an antibiotic complex of over fifteen closely related macrocyclic lactone analogues produced by Streptomyces kitasatoensis. The complex comprises four major components, A1, A4, A5 and A13, together with a number of poorly characterised minor analogues. The Leucomycin Complex Set contains the complex and its purified major components as standards for research.

Code No.: BIA-MS5005

Leucomycin complex

Product	Code No.	CAS#	Mol. Formula	Mol Wt.	Qty
Leucomycin complex	BIA-L1551	1392-21-8	-	-	1mg
Leucomycin A ₁	BIA-L1538	16846-34-7	$C_{40}H_{67}NO_{14}$	786.0	1mg
Leucomycin A ₄	BIA-L1364	18361-46-1	$C_{41}H_{67}NO_{15}$	814.0	1mg
Leucomycin A ₅	BIA-L1357	18361-45-0	$C_{39}H_{65}NO_{14}$	771.9	1mg
Leucomycin A ₁₃	BIA-L1365	78897-52-6	C41H69NO14	800.0	1mg

L-Homoserine Lactone Analogue Set

Product Description: L-Homoserine lactones comprise a family of mediators of cell to cell interactions between bacteria, notably in bacterial biofilms. When secreted by the producing bacteria, homoserine lactones modulate a diverse range of metabolic functions in surrounding species, regulating not only growth and motility but also the production of secondary metabolites such as antibiotics. The most significant variable defining the function of the homoserine lactones is the length of the acyl chain, with shorter chains displaying opposing actions to the longer chains. The L-Homoserine Lactone Analogue Set provides the full set of available homoserine lactones from acetyl (C2) to octadecanoyl (C18).

Product	Code No.	CAS #	Mol. Formula	Mol Wt.	Qty
Acetyl-L-homoserine lactone	BIA-A1493	51524-71-1	$C_6H_9NO_3$	143.1	1mg
Butyryl-L-homoserine lactone	BIA-B1494	67605-85-0	$C_8H_{13}NO_3$	171.2	1mg
Decanoyl-L-homoserine lactone	BIA-D1497	177315-87-6	$C_{14}H_{25}NO_3$	255.4	1mg
Dodecanoyl-L-homoserine lactone	BIA-D1498	137173-46-7	$C_{16}H_{29}NO_3$	283.4	1mg
Hexadecanoyl-L-homoserine lactone	BIA-H1500	87206-01-7	$C_{20}H_{37}NO_3$	339.5	1mg
Hexanoyl-L-homoserine lactone	BIA-H1495	147852-83-3	$C_{10}H_{17}NO_3$	199.3	1mg
Octadecanoyl-L-homoserine lactone	BIA-O1501	479050-96-9	C ₂₂ H ₄₁ NO ₃	367.6	1mg
Octanoyl-L-homoserine lactone	BIA-O1496	147852-84-4	$C_{12}H_{21}NO_3$	227.3	1mg
Tetradecanoyl-L-homoserine lactone	BIA-T1499	202284-87-5	C ₁₈ H ₃₃ NO ₃	311.5	1mg



Milbemycin Analogue Set

Product Description: Milbemycins are a class of macrocyclic lactones with acaricidal, nematocidal and insecticidal activity. Milbemeycins are related to the avermectins but lack the sugar substituent of the latter class. The six analogues in the Milbemycin Analogue Set represent the two commercial products in this class, milbemectin, an agri-chemical insecticide, and milbemycin oxime, used as an anthelmintic, as well as their respective major components.

Code No.: BIA-MS5016

Product	Code No.	CAS #	Mol. Formula	Mol Wt.	Qty
Milbemectin	BIA-M1553	-	-		1mg
Milbemycin A ₃	BIA-M1051	51596-10-2	C ₃₁ H ₄₄ O ₇	528.7	1mg
Milbemycin A ₄	BIA-M1052	51596-11-3	C ₃₂ H ₄₆ O ₇	542.3	1mg
Milbemycin oxime	BIA-M1299	129496-10-2	-	-	1mg
Milbemycin A ₃ oxime	BIA-M1531	114177-14-9	$C_{31}H_{43}NO_{7}$	541.7	1mg
Milbemycin A ₄ oxime	BIA-M1532	93074-04-5	C ₃₂ H ₄₅ NO ₇	555.7	1mg

Oxytetracycline Degradation Set

Product Description: Oxytetracycline is a potent member of the tetracycline antibiotic class that has played a pivotal role in human and animal health for over 50 years. Oxytetracycline is a linear tetracycle which can be degraded under various conditions, such as acidity, alkalinity, heat, oxidation, light and temperature. The degradation products are not biologically inert; rather, they are oxidative and isomeric analogues with unique physical and chemical properties that are not well characterised. The Oxytetracycline Degradation Set provides the major degradation products described in the literature as a tool for understanding and monitoring the fate of oxytetracycline on storage and in biological systems.

HOVE	OH N(C	OH
OH O	OH O	YNH ₂
011 0	etracycli	ne

Product	Code No.	CAS #	Mol. Formula	Mol Wt.	Qty
Oxytetracycline	BIA-O1336	79-57-2	$C_{22}H_{24}N_2O_9$	460.4	1mg
a-Apooxytetracycline	BIA-A1343	18695-01-7	$C_{22}H_{22}N_2O_8$	442.4	1mg
β-Apooxytetracycline	BIA-A1344	18751-99-0	$C_{22}H_{22}N_2O_8$	442.4	1mg
Epioxytetracycline	BIA-E1342	14206-58-7	$C_{22}H_{24}N_2O_9$	460.4	1mg



Pleuromutilin Analogue Set

Product Description: Research on the pleuromutilin class of antibiotics has spanned 60 years with many analogues prepared and published in the patent and scientific literature. The seven analogues in the Pleuromutilin Analogue Set represent pivotal advances in the development of the pleuromutilin class, with the analogues displaying a range of physico-chemical, potency, spectrum of action and cross-resistance profiles. The Pleuromutilin Analogue Set is a useful tool in addressing current research questions on antibiotics using the resources accumulated since the discovery of pleuromutilin in 1951.

accumulated since the discovery of pleuromatilin in 1991.							
Product	Code No.	CAS #	Mol. Formula	Mol Wt.	Qty		
Pleuromutilin	BIA-P1204	125-65-5	C ₂₂ H ₃₄ O ₅	378.5	1mg		
Azamulin	BIA-A1489	76530-44-4	$C_{24}H_{36}N_4O_4S$	476.6	1mg		
Dihydropleuromutilin	BIA-D1526	42302-24-9	C ₂₂ H ₃₆ O ₅	380.5	1mg		
Mutilin	BIA-M1333	6040-37-5	$C_{20}H_{32}O_3$	320.5	1mg		
Retapamulin	BIA-R1491	224452-66-8	C ₃₀ H ₄₇ NO ₄ S	517.8	1mg		
Tiamulin	BIA-T1321	55297-95-5	$C_{28}H_{47}NO_4S$	493.7	1mg		
Valnemulin	BIA-V1492	101312-92-9	$C_{31}H_{52}N_2O_5S$	564.8	1mg		

Tacrolimus Analogue Set

Product Description: Research on tacrolimus class of antibiotics spans 25 years. Each of the nine analogues in the Tacrolimus Analogue Set represent a pivotal advance in the development of the tacrolimus class, with the analogues displaying a range of physico-chemical and potency profiles. The Tacrolimus Analogue Set is a useful tool in addressing current research questions, using the resources accumulated since the discovery of tacrolimus in 1986 and recognising its relationship to the antifungal actives, ascomycin and rapamycin, discovered decades earlier.

Code No.: BIA-MS5006

Code No.: BIA-MS5008

Pleuromutilin

Product	Code No.	CAS #	Mol. Formula	Mol Wt.	Qty
Tacrolimus	BIA-T1184	104987-11-3	C44H69NO12	804.0	1mg
Ascomycin	BIA-A1237	104987-12-4	$C_{43}H_{69}NO_{12}$	792.0	1mg
Everolimus	BIA-E1384	159351-69-6	$C_{53}H_{83}NO_{14}$	954.2	1mg
Pimecrolimus	BIA-P1385	137071-32-0	$C_{43}H_{68}CINO_{11} \\$	810.5	1mg
Rapamycin	BIA-R1183	53123-88-9	$C_{51}H_{79}NO_{13}$	914.2	1mg
Ridaforolimus	BIA-R1450	572924-54-0	$C_{53}H_{84}NO_{14}P$	990.2	1mg
Temsirolimus	BIA-T1386	162635-04-3	$C_{56}H_{87}NO_{16}$	1030.3	1mg
Umirolimus	BIA-U1383	851536-75-9	$C_{55}H_{87}NO_{14}$	986.3	1mg
Zotarolimus	BIA-Z1387	221877-54-9	$C_{52}H_{79}N_5O_{12}$	966.2	1mg

Teicoplanin Complex Set

Product Description: Teicoplanin complex is family of closely related metabolites produced by Actinoplanes teichomyceticus. Teicoplanin complex possesses potent broad spectrum activity against Gram positive bacteria, including MRSA and E. faecalis. The metabolites share a common glycopeptide core (teicoplanin A-3) on which a family of fatty acids varying in length, degree of saturation and branching are linked as amides through one of the aminoglycoside moieties. The major component of the complex is teicoplanin A2 which itself has five major components (teicoplanin A2-1 to A2-5) contained in the Teicoplanin Complex Set

Code No.: BIA-MS5010

Teicoplanin complex

Product	Code No.	CAS #	Mol. Formula	Mol Wt.	Qty
Teicoplanin complex	BIA-T1187	61036-62-2	-	-	1mg
Teicoplanin A2-2	BIA-T1509	91032-26-7	$C_{88}H_{97}CI_2N_9O_{33}$	1879.7	1mg
Teicoplanin A2-3	BIA-T1510	91032-36-9	$C_{88}H_{97}CI_2N_9O_{33}$	1879.7	1mg
Teicoplanin A2-4	BIA-T1511	91032-37-0	C ₈₉ H ₉₉ Cl ₂ N ₉ O ₃₃	1893.7	1mg
Teicoplanin A2-5	BIA-T1512	91032-38-1	C ₈₉ H ₉₉ Cl ₂ N ₉ O ₃₃	1893.7	1mg

Tetracycline Analogue Set

Product Description: Tetracyclines are a class of linear tetracyclic antibiotics used for over 60 years with thousands of analogues prepared and published in the patent and scientific literature. Each of the ten analogues in the Tetracycline Analogue Set represent pivotal advances in the development of the class, with the analogues displaying a range of physico-chemical, potency, spectrum of action and cross-resistance profiles. The set is a useful tool in addressing current research questions on antibiotics using the resources accumulated since the discovery of chlortetracycline in 1948.

Product	Code No.	CAS #	Mol. Formula	Mol Wt.	Qty
Tetracycline	BIA-T1334	60-54-8	$C_{22}H_{24}N_2O_8$	444.4	1mg
Chlortetracycline	BIA-C1335	57-62-5	$C_{22}H_{23}CIN_2O_8$	478.9	1mg
Demeclocycline	BIA-D1462	127-33-3	$C_{21}H_{21}CIN_2O_8$	468.9	1mg
Doxycycline	BIA-D1469	564-25-0	$C_{22}H_{24}N_2O_8$	444.4	1mg
Meclocycline	BIA-M1464	2013-58-3	$C_{22}H_{21}CIN_2O_8$	476.9	1mg
Methacycline	BIA-M1467	914-00-1	$C_{22}H_{22}N_2O_8$	442.4	1mg
Minocycline	BIA-M1471	10118-90-8	$C_{23}H_{27}N_3O_7$	457.5	1mg
Oxytetracycline	BIA-01336	79-57-2	$C_{22}H_{24}N_2O_9$	460.4	1mg
Tigecycline	BIA-T1371	220620-09-7	$C_{29}H_{39}N_5O_8$	585.7	1mg

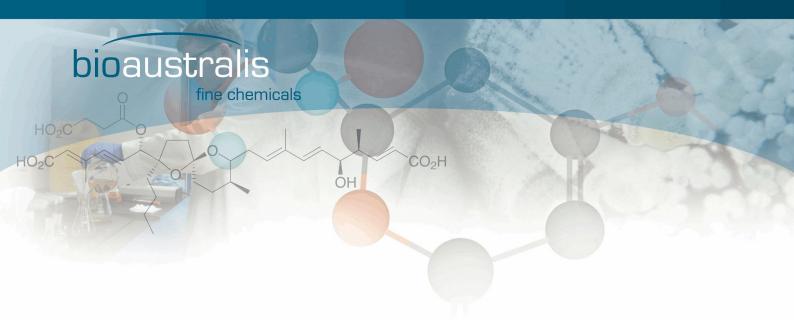
Tetracycline Degradation Set

Product Description: Tetracycline is a potent broad spectrum antibiotic that has played a pivotal role in human and animal health for over 60 years. Tetracycline is a linear tetracycle which can be degraded under various conditions, such as acidity, alkalinity, heat, oxidation, light and temperature. The degradation products are not biologically inert; rather, they are oxidative and isomeric analogues with unique physical and chemical properties that are not well characterised. The Tetracycline Degradation Set provides the major degradation products described in the literature as a tool for understanding and monitoring the fate of tetracycline on storage and in biological systems.

$$\begin{array}{c|c} HO & H & N(CH_3)_2 \\ \hline & & & \\ \hline & & & \\ OH & O & OH \\ \hline & & \\ OH & O & OH \\ \hline & & \\ Tetracycline \end{array}$$

Product	Code No.	CAS #	Mol. Formula	Mol Wt.	Qty
Tetracycline	BIA-T1334	60-54-8	$C_{22}H_{24}N_2O_8$	444.4	1mg
Anhydrotetracycline hydrochloride	BIA-A1340	13803-65-1	$C_{22}H_{23}CIN_2O_7$	462.9	1mg
Epianhydrotetracycline hydrochloride	BIA-E1341	4465-65-0	$C_{22}H_{23}CIN_2O_7$	462.9	1mg
Epitetracycline hydrochloride	BIA-E1339	23313-80-6	$C_{22}H_{25}CIN_2O_8$	480.9	1mg





Products

March 2017

A 39183A

Code No.: BIA-A1612 Pack Sizes: 1 mg, 5 mg

A 39183A is a rare 9,9'-bianthryl antibiotic related to setomimycin isolated from a strain of Streptomyces by researchers at Eli Lilly, USA, in 1981. A 39183A has broad spectrum antibiotic activity against both susceptible and resistant isolates including many anaerobic species. The patent reported that A 38183A acts as an ionophore, aiding the partitioning of Mg+ and Ca+ ions into organic solvents and transport of ferric ions into mitochondria.

CAS Number: 79426-51-0 Molecular Formula: $C_{34}H_{30}O_{10}$ Molecular Weight: 598.6

Source: Streptomyces sp. Purity: >95% by HPLC

A 54556A

Code No.: BIA-A1570 Pack Sizes: 1 mg, 5 mg

A 54556A is an unusual depsipeptide isolated from Streptomyces hawaiiensis by researchers at Eli Lilly in 1985, featuring a trienone side chain. A 54556A is potently active against Gram positive and Gram negative bacteria, including MRSA. A 54556A was the original lead structure of the recently re-discovered acyldepsipeptide (ADEP) antibiotics that act by activating and disregulating Clp-family proteins. ADEPs are considered important leads in the development of new generations of antibiotics against resistant bacteria.

CAS Number: 95398-45-1 Molecular Formula: $C_{38}H_{50}N_6O_8$ Molecular Weight: 718.8

Source: Streptomyces sp. Purity: >95% by HPLC

A 54556B

Code No.: BIA-A1571 Pack Sizes: 0.5 mg, 2.5 mg

A 54556B is an unusual depsipeptide featuring a trienone side chain isolated from Streptomyces hawaiiensis as antibiotics by researchers at Eli Lilly in 1985,. A 54556B is a potent antibacterial against Gram positive and Gram negative bacteria including MRSA.

A 54556B is a member of the recently re-discovered acyldepsipeptide (ADEP) antibiotics that act by activating and disregulating Clp-family proteins. ADEPs are considered important leads in the development of new generations of antibiotics against resistant bacteria.

 $\begin{array}{lll} \text{CAS Number:} & 95398\text{-}44\text{-}0 \\ \text{Molecular Formula:} & C_{37}H_{48}N_6O_8 \\ \text{Molecular Weight:} & 704.8 \\ \end{array}$

Source: Streptomyces sp. Purity: >95% by HPLC

A 83016F

Code No.: BIA-A1417 Pack Sizes: 0.5 mg, 2.5 mg

A 83016F is an unusual polyene originally isolated from an unidentified actinomycete and reported in 1992. Structurally, A 83016F is related to the phenelfamycins. A 83016F exhibits activity against Gram positive bacteria.

CAS Number: 142435-72-1 Molecular Formula: $C_{37}H_{55}NO_{10}$ Molecular Weight: 673.8

Source: Streptomyces sp. Purity: >95% by HPLC

Acarbose

Code No.: BIA-A1231 Pack Sizes: 25 mg, 100 mg

Acarbose is pseudo-oligosaccharide with a terminal C7-cyclitol patented in 1975 by Bayer. Acarbose is a component of the amylostatin complex produced by species of Actinoplanes and Streptomyces. Acarbose acts as a potent inhibitor of a-glucosidases and saccharases. Since 1990, acarbose has been used therapeutically for the treatment of type 2 diabetes.

CAS Number: 56180-94-0 Molecular Formula: $C_{25}H_{43}NO_{18}$ Molecular Weight: 645.6

Source: Actinoplanes sp. Purity: >95% by HPLC

Acetylaszonalenin



Code No.: BIA-A1687 Pack Sizes: 0.5 mg, 2.5 mg

Acetylaszonalenin (LL-S490 β) is a benzodiazepine metabolite first isolated from an uncharacterised strain of Aspergillus by Ellestad and co-workers at American Cyanamid (now Pfizer) in 1973 in the



search for biologically active secondary metabolites. Acetylaszonalenin was re-discovered by Kimura and co-workers as a co-metabolite of aszonalenin in 1982. The biological role and pharmacology of acetylaszonalenin have received little attention to date.

CAS Number: 42230-55-7 Molecular Formula: $C_{25}H_{25}N_3O_3$ Molecular Weight: 415.5

Source: Neosartorya spinosa
Purity: >95% by HPLC

N-Acetylhistamine



Code No.: BIA-A1737 Pack Sizes: 5 mg, 25 mg

N-Acetylhistamine is an acetyl derivative of a biogenic acid commonly found in many microbial fermentations, most notably dermatophytic fungi belonging to the genus, Trichophyton. N-Acetylhistamine is produced by decarboxylation and acetylation of histidine. N-Acetylhistamine exhibits weak activity in a diverse range of bioassays and is thus an important standard for analytical and bioassay dereplication of crude microbial extracts.

CAS Number: 673-49-4 Molecular Formula: $C_7H_{11}N_3O$ Molecular Weight: 153.2 Source: Synthetic Purity: >95% by HPLC

Acetyl-L-homoserine lactone

Code No.: BIA-A1493 Pack Sizes: 5 mg, 25 mg

Acetyl-L-homoserine lactone is the shortest alkyl homologue and most polar of a family of mediators of cell to cell interactions in bacterial biofilms. Acylhomoserine lactones have been detected in hundreds of bacterial species and, while the homologues vary between species and strains, the homoserine lactones are the major chemical modulators of within and between cell communication and regulation. Acetyl-L-homoserine lactone is not found in nature and can serve as a polar negative control for quorum sensing events.

CAS Number: 51524-71-1 Molecular Formula: $C_6H_9NO_3$ Molecular Weight: 143.1 Source: Synthetic Purity: >99% by HPLC

N-Acetylserotonin



Code No.: BIA-A1738 Pack Sizes: 5 mg, 25 mg

N-Acetylserotonin is an acetyl derivative of a biogenic acid commonly found in many microbial fermentations, most notably dermatophytic fungi belonging to the genus Trichophyton. N-Acetylserotonin is produced by decarboxylation and acetylation of serotonin. N-Acetylserotonin exhibits weak activity in a diverse range of bioassays and is thus an important standard for analytical and bioassay dereplication of crude microbial extracts.

CAS Number: 1210-83-9 Molecular Formula: $C_{12}H_{14}N_2O_2$ Molecular Weight: 218.3 Source: Synthetic Purity: >95% by HPLC

N-Acetyltryptamine



Code No.: BIA-A1732 Pack Sizes: 5 mg, 25 mg

N-Acetyltryptamine is an acetyl derivative of a biogenic acid commonly found in many microbial fermentations. N-Acetyltryptamine exhibits weak activity in a diverse range of bioassays and is thus an important standard for analytical and bioassay dereplication of crude microbial extracts.

CAS Number: 1016-47-3 Molecular Formula: $C_{12}H_{14}N_{2}O$ Molecular Weight: 202.3 Source: Synthetic Purity: >95% by HPLC

N-Acetyltyramine



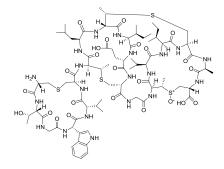
Code No.: BIA-A1731 Pack Sizes: 5 mg, 25 mg

N-Acetyltyramine is an acetyl derivative of a biogenic acid commonly found in many microbial fermentations. N-Acetyltyramine exhibits weak activity in a diverse range of bioassays and is thus an important standard for analytical and bioassay dereplication of crude microbial extracts.

CAS Number: 1202-66-0 Molecular Formula: $C_{10}H_{13}NO_2$ Molecular Weight: $C_{17}C_{19}$ Source: Synthetic Purity: $C_{19}C_{19}$ by HPLC

Actagardin

Code No.: BIA-A1528 Pack Sizes: 1 mg, 5 mg





Actagardin is a high molecular weight tetracyclic antibiotic produced by several species of Actinoplanes. Actagardin is an antibiotic in which the macrocyclic rings are formed by thioether, rather than disulphide, bridges. Actagardin is a potent Gram positive and Gram negative antibiotic. Actagardin acts by inhibition of peptidoglycan biosynthesis.

CAS Number: 59165-34-3 Molecular Formula: $C_{81}H_{124}N_{20}O_{24}S_4$ Molecular Weight: 1890.2

Source: Actinoplanes sp. Purity: >98% by HPLC

Actinomycin D

Code No.: BIA-A1185 Pack Sizes: 25 mg, 100 mg

Actinomycin D is the most studied member of a family of unique bicyclic depsipeptides produced by several Streptomyces species. The depsipeptides are linked by a heterocyclic benzoxazone "anchor" that gives the metabolites a highly distinctive red/orange colour. Actinomycin D exhibits potent antibiotic and antitumor activity via DNA intercalation leading to the inhibition of nucleic acid synthesis. Tumor cell death has been demonstrated to occur by apoptosis.

CAS Number: 50-76-0 Molecular Formula: $C_{62}H_{86}N_{12}O_{16}$ Molecular Weight: 1255.4

Source: Streptomyces sp. Purity: >99% by HPLC

Actinopyrone A

Code No.: BIA-A1001 Pack Sizes: 0.5 mg, 2.5 mg

Actinopyrone A is a gamma-pyrone compound isolated from a Streptomyces sp. It shows selective (>10E6 fold) and potent (MIC 0.0001 μ g/ml) activity against Helicobacter pylori, the principal cause of peptic ulcer disease. Actinopyrone A was originally identified for its coronary vasodilating activity and weak activity against some Gram positive bacteria and dermatophytes.

CAS Number: 88378-59-0 Molecular Formula: $C_{25}H_{36}O_4$ Molecular Weight: 400.6

Source: Streptomyces pactum
Purity: >95% by HPLC

Actinotetraose Hexatiglate

Code No.: BIA-A1002 Pack Sizes: 1 mg, 5 mg

Actinotetraose is a unique tetrasaccharide with six tiglate esters isolated from an unidentified Amycolatopsis culture. The sugar possesses a two-fold axis of symmetry and is a co-metabolite of quinaldopeptin, a potent antitumor agent.

 $\begin{array}{lll} \text{CAS Number:} & 216590\text{-}44\text{-}2 \\ \text{Molecular Formula:} & C_{54}H_{78}O_{27} \\ \text{Molecular Weight:} & 1159.2 \\ \end{array}$

Source: *Amycolatopsis* sp. Purity: >95% by HPLC

Adipostatin A



Code No.: BIA-A1689 Pack Sizes: 5 mg, 25 mg

Adipostatin A is a hydrophobic resorcinol metabolite first isolated from Streptomyces cyaneus as an inhibitor of glycerol-3-phosphate dehydrogenase by researchers at the University of Tokyo in 1992. Glycerol-3-phosphate dehydrogenase is an important enzyme for the regulation of adipocyte proliferation in the treatment of obesity. Adipostatin A inhibits the accumulation of triglycerides in model cells lines without affecting cell viability. Adipostatin A has antifilarial activity, identified in a high throughput assay using asparaginyl-tRNA synthetase from the filarial worm, Brugia malayi.

CAS Number: 3158-56-3 Molecular Formula: $C_{21}H_{36}O_2$ Molecular Weight: 320.5

Source: Streptomyces sp. Purity: >95% by HPLC

Aflatoxin B1

Code No.: BIA-A1232 Pack Sizes: 1 mg, 5 mg

Aflatoxin B1 is the major analogue of a family of bisfuranocoumarin mycotoxins produced by Aspergillus flavus and related species. Aflatoxin B1 exhibits a distinctive UV spectrum and blue fluorescence. Aflatoxins are among the most potent mycotoxins known but are in fact "pre-toxins", requiring metabolic activation to the toxic principle. Aflatoxins are found widely in nature in trace amounts, particularly in grains and nuts. The toxicity of these



metabolites was first recognised in the 1950s and their structures elucidated in 1963. Aflatoxins have been extensively reviewed.

CAS Number: 1162-65-8 Molecular Formula: $C_{17}H_{12}O_6$ Molecular Weight: 312.3

Source: Aspergillus flavus
Purity: >98% by HPLC

Aflatoxin B2

Code No.: BIA-A1233 Pack Sizes: 1 mg, 5 mg

H OCH3

Aflatoxin B2 is the minor analogue of the blue fluorescent family of bisfuranocoumarin mycotoxins produced by Aspergillus flavus and related species. Aflatoxins are one of the most potent mycotoxins known but are in fact "pre-toxins", requiring metabolic activation to the toxic principle. Aflatoxins are found widely in nature in trace amounts, particularly in grains and nuts. The toxicity of these metabolites was first recognised in the 1950s and their structures elucidated in 1963. Aflatoxins have been extensively reviewed.

 $\begin{array}{lll} \text{CAS Number:} & 7220\text{-}81\text{-}7 \\ \text{Molecular Formula:} & C_{17}H_{14}O_6 \\ \text{Molecular Weight:} & 314.3 \\ \end{array}$

Source: Aspergillus flavus
Purity: >98% by HPLC

Aflatoxin G1

Code No.: BIA-A1234 Pack Sizes: 1 mg, 5 mg

Aflatoxin G1 is the major analogue of the green fluorescent family of bisfuranocoumarin mycotoxins produced by Aspergillus flavus and related species. Aflatoxins are one of the most potent mycotoxins known but are in fact "pre-toxins", requiring metabolic activation to the toxic principle. Aflatoxins are found widely in nature in trace amounts, particularly in grains and nuts. The toxicity of these metabolites was first recognised in the 1950s and their structures elucidated in 1963. Aflatoxins have been extensively reviewed.

CAS Number: 1165-39-5 Molecular Formula: $C_{17}H_{12}O_7$ Molecular Weight: 328.3

Source: Aspergillus flavus
Purity: >98% by HPLC

Aflatoxin G2

Code No.: BIA-A1235 Pack Sizes: 0.5 mg, 2.5 mg

Aflatoxin G2 is the minor analogue of the green fluorescent family of bisfuranocoumarin mycotoxins produced by Aspergillus flavus and related species. Aflatoxins are one of the most potent

mycotoxins known but are in fact "pre-toxins", requiring metabolic activation to the toxic principle. Aflatoxins are found widely in nature in trace amounts, particularly in grains and nuts. The toxicity of these metabolites was first recognised in the 1950s and their structures elucidated in 1963. Aflatoxins have been extensively reviewed.

CAS Number: 7241-98-7 Molecular Formula: $C_{17}H_{14}O_{7}$ Molecular Weight: 330.3

Source: Aspergillus flavus
Purity: >98% by HPLC

Alamethicin F50

Code No.: BIA-A1543 Pack Sizes: 2.5 mg, 10 mg

Alamethicin F50 is a neutral linear peptaibol complex with potent antibiotic activity, containing 20 "amino acids" with acetyl and phenylalaninol termini, produced by Trichoderma sp. Alamethicin F50 acts an ionopohore, transporting ions through membranes and artificial lipid membranes. Alamethicin F50 forms voltage-dependent ion channels in lipid bilayer membranes. Alamethicin F50 is co-produced with an acidic linear peptaibol complex (alamethicin F30). Alamethicin itself is a variable mixture of the acidic and neutral components. In general, reports on alamethicin do not specify the ratio of F50 to F30 in the complex and comparative data between the complexes is scant.

CAS Number: 56165-93-6

Molecular Formula: C₉₂H₁₅₁N₂₃O₂₄

Molecular Weight: 1963.4

Source: *Trichoderma viride*Purity: >98% by HPLC

1-Alaninechlamydocin

Code No.: BIA-A1402 Pack Sizes: 0.5 mg, 2.5 mg

1-Alaninechlamydocin is a cyclic tetrapeptide containing a single $\beta\textsc{-}$ amino acid, which was isolated from Diheterospora chlamydosporia in 1992. Although less widely characterised than the related chlamydocin, 1-alaninechlamydocin exhibits potent antitumor activity and acts by inhibiting histone deacetylase.

CAS Number: 141446-96-0 Molecular Formula: $C_{27}H_{36}N_4O_6$ Molecular Weight: 512.6

Source: Unidentified fungus
Purity: >95% by HPLC



Albofungin

Code No.: BIA-A1419 Pack Sizes: 1 mg, 5 mg

Albofungin is a polyaromatic heterocycle containing a rare N-aminoamide, isolated from a Streptomyces species in Russia in 1959. Albofungin exhibits a broad biological profile with antibiotic, antifungal, anthelmintic and very potent antitumor activity. The mode of action of albofungin has not been investigated.

CAS Number: 37895-35-5 Molecular Formula: $C_{27}H_{24}N_2O_9$ Molecular Weight: 520.5

Source: Streptomyces sp. Purity: >95% by HPLC

Amauromine



Code No.: BIA-A1631 Pack Sizes: 0.5 mg, 2.5 mg

Amauromine, a symmetric bis-dihydroindole, was first isolated from Amauroascus sp. by researchers at Fujisawa (now Astellas) in 1984 as a potent vasodilator. Amauromine has two prenylated dihydroindoles coupled through their respective 2- and 3-positions to a central diketopiperazine. Amauromine was later reported as a secondary metabolite in a related genus, Auxarthron, and its anamorphic genus, Malbranchea. Amauromine is a potent inhibitor of cannabinoid CB1 receptors with antagonistic activity at the cannabinoid-like orphan receptor GPR18.

CAS Number: 88360-87-6 Molecular Formula: $C_{32}H_{36}N_4O_2$ Molecular Weight: 508.7

Source: *Unidentified fungus*Purity: >95% by HPLC

Amphomycin

Code No.: BIA-A1601 Pack Sizes: 1 mg, 5 mg

Amphomycin is a lipopeptide antibiotic produced by Streptomycetes and Actinoplanes, initially reported by researchers at Bristol-Myers in 1953 from Streptomyces canus. Amphomycin was marketed as a complex of closely related analogues in the 1950s and 1960s. Structure elucidation was not completed until

2000. Amphomycin is active against Gram positive bacteria, inhibiting peptidoglycan synthesis and blocking cell wall development. Amphomycin is closely related to a number of "lost" antibiotics, aspartocin, crystallomycin, glumamycin, friulimicin, laspartocin, tsushimycin and zaomycin. Interest in amphomycin was re-awakened with the discovery of friulimicin activity against antibiotic resistant strains.

CAS Number: 1402-82-0 Molecular Formula: $C_{58}H_{91}N_{13}O_{20}$ Molecular Weight: 1290.4 Source: Streptomyces sp. Purity: >95% by HPLC

Amphotericin B

Code No.: BIA-A1441 Pack Sizes: 5 mg, 25 mg

Amphotericin B is heptaene polyene antifungal originally discovered as a metabolite of Streptomyces nodosus in 1956. Amphotericin B acts by binding sterols in the cell membrane leading to the formation of transmembrane channels and subsequent ion leakage. Amphotericin B is poorly water soluble so has been developed for therapeutic use as a complex with desoxylate or in liposomes to improve bioavailability. Amphotericin B is widely used as a research reagent in diverse applications with over 15,000 literature citations.

CAS Number: 1397-89-3 Molecular Formula: $C_{47}H_{73}NO_{17}$ Molecular Weight: 924.1

Source: Streptomyces sp. Purity: >99% by HPLC

Andrastin A



Code No.: **BIA-A1649** Pack Sizes: **0.5 mg, 2.5 mg**

Andrastin A is potent inhibitor of protein farnesyltransferase (PFTase) isolated by Omura and co-workers at the Kitasato Institute, Japan in 1996. Andrastin A is a meroterpenoid with an androstane skeleton biosynthesized from a sesquiterpene and a tetraketide. The cyclopentane ring of andrastin A exhibits characteristic keto-enol tautomerism. Andrastin A is potently active against mammalian tumor cell lines and is devoid of antimicrobial activity.

CAS Number: 174232-42-9 Molecular Formula: $C_{28}H_{38}O_7$ Molecular Weight: 486.6 Source: Penicillium sp. Purity: >95% by HPLC



Anguinomycin A

Code No.: BIA-A1003 Pack Sizes: 0.1 mg, 0.5 mg

Anguinomycin A, isolated from a Streptomyces sp., displays nanomolar cytotoxicity to murine P388 leukemia cells. In addition, it shows antitumor activity in vivo against murine Lewis lung carcinoma and P388 leukemia. Anguinomycin A is an analogue of leptomycin B, an inhibitor of nuclear export of proteins.

CAS Number: 111278-01-4 Molecular Formula: $C_{31}H_{44}O_6$ Molecular Weight: 512.7

Source: Streptomyces sp. Purity: >95% by HPLC

Anhydrochlortetracycline hydrochloride

Code No.: **BIA-A1552** Pack Sizes: **1 mg, 5 mg**

Anhydrochlortetracycline is a degradation product of chlortetracycline formed by acid-catalysed isomerisation of the dimethylamino group at C4. Anhydrochlortetracycline exhibits little antibiotic activity but its abundance is indicative of poor storage and handling of chlortetracycline.

 $\begin{array}{lll} \text{CAS Number:} & 65490\text{-}24\text{-}6 \\ \text{Molecular Formula:} & \text{C}_{22}\text{H}_{22}\text{Cl}_{2}\text{N}_{2}\text{O}_{7} \\ \text{Molecular Weight:} & 497.3 \\ \end{array}$

Source: Semi-synthetic Purity: >98% by HPLC

Anhydroepiophiobolin A

Code No.: BIA-A1536 Pack Sizes: 1 mg, 5 mg

Anhydroepiophiobolin A is a dehydrated analogue of ophiobolin epimerised at the C6 position. Anhydroepiophiobolin A is the major terminal degradation product of ophiobolin A and is co-produced with other ophiobolins in many Bipolaris species. Prior to 1984, references to "anhydroophiobolin" almost certainly refer to anhydroepiophiobolin A as the epimerisation at C6 was not well recognised. Under controlled degradation conditions both anhydroepiophiobolin A and anhydroophiobolin A are observed, but the latter is a minor component readily epimerised to anhydroepiophiobolin A. Like all ophiobolins, anhydroepiophiobolin A possesses a broad biological profile with antibacterial, antifungal, antitumor, herbicidal and nematocidal activities.

CAS Number: 90411-20-4 Molecular Formula: $C_{25}H_{34}O_3$ Molecular Weight: 382.5 Source: Bipolaris sp. Purity: >98% by HPLC

Anhydroerythromycin A

Code No.: BIA-A1348 Pack Sizes: 1 mg, 5 mg

Anhydroerythromycin A is a degradation product of erythromycin formed by a complex internal rearrangement of erythromycin A on exposure to acidic conditions. In acid, erythromycin A forms the enol ether and then undergoes a second internal cyclisation of the C12–OH and C9 enol to afford the ketal, anhydroerythromycin A. Anhydroerythromycin A is an important analytical standard for erythromycin A stability studies.

CAS Number: 23893-13-2
Molecular Formula: C₃₇H₆₅NO₁₂
Molecular Weight: 715.9
Source: Sami-synthe

Source: Semi-synthetic Purity: >98% by HPLC

Anhydroophiobolin A

Code No.: BIA-O1198 Pack Sizes: 1 mg, 5 mg

3-Anhydroophiobolin A is the dehydrated analogue of ophiobolin A and is a major member of the ophiobolin complex of phytotoxic metabolites produced by many species of the genus Bipolaris. Like all ophiobolins, 3-anhydroophiobolin A possesses a broad biological profile with antibacterial, antifungal, antitumor, herbicidal and nematocidal activities.

CAS Number: 6026-65-9 Molecular Formula: $C_{25}H_{34}O_3$ Molecular Weight: 382.5 Source: Bipolaris sp. Purity: >95% by HPLC

Anhydrotetracycline hydrochloride

Code No.: BIA-A1340 Pack Sizes: 1 mg, 5 mg

Anhydrotetracycline hydrochloride is a salt of a degradation product of tetracycline, formed by dehydration at the C6 position under acidic conditions to aromatise the B ring. Anhydrotetracycline is an important standard for monitoring tetracycline stability. Although the degradation is associated with a loss of antibiotic activity, anhydrotetracycline is considered biologically active and is thought responsible for aspects of tetracycline toxicity.

CAS Number: 13803-65-1 Molecular Formula: $C_{22}H_{23}CIN_2O_7$



Molecular Weight: 462.9

Source: Semi-synthetic Purity: >95% by HPLC

Anidulafungin

Code No.: BIA-A1423 Pack Sizes: 1 mg, 5 mg

Anidulafungin is a semi-synthetic cyclic lipopeptide belonging to the echinocandin class that was reported in 1995 and commercially developed by Eli Lilly. Anidulafungin inhibits the synthesis of $\beta\text{-}(1,3)\text{-D-glucan},$ an essential component of the cell wall of susceptible fungi and is extensively referenced in the literature with over 400 citations.

 $\begin{array}{lll} \text{CAS Number:} & 166663\text{-}25\text{-}8 \\ \text{Molecular Formula:} & C_{58}H_{73}N_7O_{17} \\ \text{Molecular Weight:} & 1140.2 \\ \end{array}$

Source: Semi-synthetic
Purity: >98% by HPLC

Anisomycin

Code No.: BIA-A1215 Pack Sizes: 25 mg, 100 mg

HO, O OCH

Anisomycin is a phenylmethylenepyrrolidine first isolated from Streptomyces griseolus in 1954 as an antiprotozoan with antifungal activity. Anisomycin is an inhibitor of protein synthesis by binding to the 60S ribosomal subunit. Interestingly, anisomycin has found use for the induction of amnesia in animal models. Anisomycin also induces apoptosis and is a selective signalling agonist, activates mitogen-activated protein (MAP) kinases and is immunomodulatory via its action on T cells.

CAS Number: 22862-76-6 Molecular Formula: $C_{14}H_{19}NO_4$ Molecular Weight: 265.3

Source: Streptomyces griseolus
Purity: >98% by HPLC

Ansatrienin A

Code No.: BIA-A1004 Pack Sizes: 1 mg, 5 mg

HN OCH

Ansatrienin A, isolated from a Streptomyces sp., is closely related to the cytotrienins and trienomycins. It displays potent activity against tumor cell lines and inhibits osteoclastic bone resorption.

Ansatrienin A also significantly potentiates the action of several clinical anti-cancer agents.to the 60S ribosomal subunit.

CAS Number: 82189-03-5 Molecular Formula: $C_{36}H_{48}N_2O_8$ Molecular Weight: 636.8

Source: Streptomyces sp. Purity: >99% by HPLC

Ansatrienin B

Code No.: BIA-A1005 Pack Sizes: 1 mg, 5 mg

Ansatrienin B, also known as Mycotrienin II and Antibiotic T 23II, was isolated from a Streptomyces sp. Closely related to the cytotrienins and trienomycins, it displays potent activity against tumor cell lines and inhibits osteoclastic bone resorption. Ansatrienin B also significantly potentiates the action of several clinical anti-cancer agents.

CAS Number: 82189-04-6 Molecular Formula: $C_{36}H_{50}N_2O_8$ Molecular Weight: 638.8

Source: Streptomyces sp.

Purity: >95% by HPLC (< 5% Ansatrienin A)

Antimycin A1

Code No.: BIA-A1442 Pack Sizes: 0.5 mg, 2.5 mg

Antimycin A1 is the most hydrophobic of the four analogues of the antimycin A complex. Like all antimycins, antimycin A1 exhibits potent antifungal, anthelmintic, insecticidal, antiviral and antitumor activity across a range of bioassays. Recent investigation has highlighted the importance of individual members of the complex as bioprobes. Antimycin A1 inhibits angiogenesis via a decrease in VEGF production.

CAS Number: 642-15-9
Molecular Formula: C28H40N2O9
Molecular Weight: 548.6

Source: Streptomyces sp. Purity: >98% by HPLC

Antimycin A2

Code No.: BIA-A1443 Pack Sizes: 0.5 mg, 2.5 mg



Antimycin A2 is a homologue of the antimycin complex, first resolved from antimycin A1 in 1959. Antimycin A2, like all antimycins, is a potent inhibitor of respiration by inhibiting the oxidation of ubiquinol to ubiquinone. Antimycin A2 exhibits broad biological activity as an antifungal, anthelmintic, insecticidal, antiviral and antitumor active. Lack of availability of the individual antimycins has hindered greater understanding of their common and unique molecular targets.

 $\begin{array}{lll} \text{CAS Number:} & 27220\text{-}57\text{-}1 \\ \text{Molecular Formula:} & C_{27}\text{H}_{38}\text{N}_2\text{O}_9 \\ \text{Molecular Weight:} & 534.6 \\ \end{array}$

Source: Streptomyces sp. Purity: >98% by HPLC

Antimycin A3

Code No.: BIA-A1444 Pack Sizes: 1 mg, 5 mg

Antimycin A3 is a homologue of the antimycin complex, first isolated in 1958 from Streptomyces blastimyceticus and coproduced with antimycin A4. Antimycin A3 is a more polar analogue of A1 and A2. Like all antimycins, antimycin A3 is a potent inhibitor of respiration by inhibiting the oxidation of ubiquinol to ubiquinone. Antimycin A3 exhibits broad biological activity as an antifungal, anthelmintic, insecticidal, antiviral and antitumor active. Lack of availability of the individual antimycins has hindered greater understanding of their common and unique molecular targets.

CAS Number: 522-70-3 Molecular Formula: $C_{26}H_{36}N_2O_9$ Molecular Weight: 520.6

Source: Streptomyces sp. Purity: >98% by HPLC

Antimycin A4

Code No.: BIA-A1445 Pack Sizes: 0.5 mg, 2.5 mg

Antimycin A4 is the most polar of the major components of the antimycin complex, first isolated in 1958 from Streptomyces blastimyceticus and co-produced with antimycin A3. Like all antimycins, antimycin A4 is a potent inhibitor of respiration by inhibiting the oxidation of ubiquinol to ubiquinone. Antimycin A4 exhibits broad biological activity as an antifungal, anthelmintic, insecticidal, antiviral and antitumor active. Lack of availability of the individual antimycins has hindered greater understanding of their common and unique molecular targets.

CAS Number: 27220-59-3 Molecular Formula: $C_{25}H_{34}N_2O_9$ Molecular Weight: 506.6

Source: Streptomyces sp. Purity: >98% by HPLC

Antimycin complex

Code No.: BIA-A1374 Pack Sizes: 5 mg, 25 mg

Antimycin A is a complex of related macrocyclic lactones, predominantly A1 to A4, isolated from several species of Streptomyces, first reported in the early 1950s as a potent antifungal. There are over 20 known analogues in the antimycin A class, mostly involving variation of the fatty acid ester chain length or adjacent alkyl starting unit. Antimycin A binds to cytochrome C reductase at the Qi site, inhibiting the oxidation of ubiquinol to ubiquinone. Antimycin A is widely used as a bioprobe with over 5,000 literature citations.

CAS Number: 1397-94-0 Molecular Formula: $C_{28}H_{40}N_2O_9$ (for A_1)

Molecular Weight: 548.6
Source: Streptomyces sp.
Purity: >95% by HPLC

Aphidicolin

Code No.: **BIA-A1217** Pack Sizes: **1 mg, 5 mg**

Aphidicolin is a tetracyclic diterpene antibiotic isolated from fungi, notably Cephalosporium, Nigrospora, Harziella and Phoma. Aphidicolin has antibiotic, antiviral and antimitotic properties, blocking the cell cycle at early S-phase. This property is used to synchronise cell division and is useful in cell differentiation research. Aphidicolin is a reversible inhibitor of DNA replication by inhibiting selected DNA polymerases. Aphidicolin induces apoptosis, prolongs the half-life of DNA methyltransferase, is active against Leishmania parasites and acts synergistically with the antitumor agents, vincristine and doxorubicin.

CAS Number: 38966-21-1 Molecular Formula: $C_{20}H_{34}O_4$ Molecular Weight: 338.5

Source: Nigrospora oryzae
Purity: >97% by HPLC

Apicidin

Code No.: BIA-A1006 Pack Sizes: 2 mg, 10 mg



Apicidin is a cyclic peptide antibiotic with broad spectrum antiparasitic and antiprotozoan activity. Apicidin, a histone deacetylase inhibitor, is anti-angiogenic and induces apoptosis.

CAS Number: 183506-66-3 Molecular Formula: $C_{34}H_{49}N_5O_6$ Molecular Weight: 623.8 Source: Fusarium sp. Purity: >95% by HPLC

a-Apooxytetracycline

Code No.: BIA-A1343 Pack Sizes: 1 mg, 5 mg

 $\alpha\textsc{-Apooxytetracycline}$ is a degradation product of oxytetracycline, formed under acidic conditions. After initial dehydration to anhydrooxytetracycline, it undergoes an internal cyclisation of the C5-OH to the C12 ketone. The resulting cleavage of the C12-C12a bond generates two isomers, $\alpha\textsc{-}$ and $\beta\textsc{-apooxytetracycline}$. $\alpha\textsc{-}$ Apooxytetracycline is an important standard for monitoring oxytetracycline stability.

CAS Number: 18695-01-7 Molecular Formula: C₂₂H₂₂N₂O₈ Molecular Weight: 442.4

Source: Semi-synthetic Purity: >95% by HPLC

β-Apooxytetracycline

Code No.: BIA-A1344 Pack Sizes: 1 mg, 5 mg

 $\beta\textsc{-Apooxytetracycline}$ is a degradation product of oxytetracycline formed under acidic conditions. After initial dehydration to anhydrooxytetracycline, it undergoes an internal cyclisation of the C5-OH to the C12 ketone. The resulting cleavage of the C12-C12a bond generates two isomers, $\alpha\textsc{-}$ and $\beta\textsc{-}$ apooxytetracycline. $\beta\textsc{-}$ Apooxytetracycline is an important standard for monitoring oxytetracycline stability.

 $\begin{array}{lll} \text{CAS Number:} & 18751\text{-}99\text{-}0 \\ \text{Molecular Formula:} & C_{22}\text{H}_{22}\text{N}_2\text{O}_8 \\ \text{Molecular Weight:} & 442.4 \\ \end{array}$

Source: Semi-synthetic Purity: >95% by HPLC

Apoptolidin

Code No.: BIA-A1007 Pack Sizes: 0.1 mg, 0.5 mg

Apoptolidin, originally isolated from a Nocardiopsis sp., induces apoptotic cell death in rat glial cells transformed with the adenovirus E1A oncogene (IC50 = 11 ng/ml). Apoptolidin is among the most selective cytotoxic agents tested by the NCI in human cancer cell lines. Although the apoptotic activity of apoptolidin correlates with F0F1-ATPase inhibition, recent evidence suggests the existence of a secondary biological target or more complex mode of action.

CAS Number: 194874-06-1 Molecular Formula: $C_{58}H_{96}O_{21}$ Molecular Weight: 1129.4

Source: *Amycolatopsis* sp. Purity: >95% by HPLC

Ascochlorin

Code No.: BIA-A1115 Pack Sizes: 0.5 mg, 2.5 mg

Ascochlorin is an antitumor fungal metabolite which specifically inhibits matrix metalloproteinase-9 (MMP-9) activity through suppression of activator protein-1 (AP-1)-dependent induction of MMP-9 gene expression. Via AP-1 suppression, ascochlorin selectively kills MX-1 cells, a human breast cancer cell line lacking estrogen receptors. Ascochlorin also shows activity against Newcastle disease and herpes simplex viruses.

CAS Number: 26166-39-2 Molecular Formula: C₂₃H₂₉ClO₄ Molecular Weight: 404.9

Source: Acremonium sp. Purity: >98% by HPLC

Ascomycin

Code No.: BIA-A1237 Pack Sizes: 1 mg, 5 mg

Ascomycin is a macrocyclic lactone closely related to tacrolimus and rapamycin. Ascomycin is isolated from several species of Streptomyces and was first reported in 1962. Ascomycin exhibits limited, potent antifungal activity but has found considerable utility as an immunosuppressant.

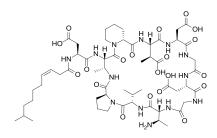
CAS Number: 104987-12-4 Molecular Formula: $C_{43}H_{69}NO_{12}$ Molecular Weight: 792.0

Source: Streptomyces hygroscopicus

Purity: >97% by HPLC

Aspartocin D

Code No.: BIA-A1620 Pack Sizes: 1 mg, 5 mg



Aspartocin D is a minor analogue of the amphomycin complex, a family of lipopeptide antibiotics produced by Streptomyces canus, isolated and reported by researchers at Fujian Institute of Microbiology in China in 2014. Aspartocin D is active against Gram positive bacteria and is presumed to act by inhibiting bacterial cell wall peptidoglycan synthesis, however its bioprofile and potential utility has not been extensively investigated.

CAS Number: 1562369-96-3 Molecular Formula: $C_{56}H_{87}N_{13}O_{20}$ Molecular Weight: 1262.4

Source: Streptomyces sp. Purity: >95% by HPLC

Aspercolorin

Code No.: BIA-A1227 Pack Sizes: 1 mg, 5 mg

Aspercolorin is an atypical cyclic tetrapeptide in which one of the amino acids is a 5-methoxyanthranilic acid. Recently, aspercolorin has found application as a secondary metabolite standard in polyphasic taxonomy for the identification of Aspergillus versicolor. No reports of the pharmacology of aspercolorin are available in the literature.

CAS Number: 29123-52-2 Molecular Formula: $C_{25}H_{28}N_4O_5$ Molecular Weight: 464.5

Source: Aspergillus versicolor
Purity: >97% by HPLC

Asperphenamate

NEW

Code No.: BIA-A1643 Pack Sizes: 1 mg, 5 mg

NH NH

Asperphenamate is an unusual ester of N-benzoylphenylalanine and N-benzoylphenylalaninol isolated from Aspergillus flavipes and first reported by Clark and co-workers in 1977. Since then, asperphenamate has been found in a broad range of Pencillium and

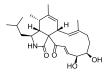
Aspergillus species and even in plants, as a product of endophytic fungi. Asperphenamate has weak antitumor activity. Recently, a more soluble analogue, BBP, was found to induce autophagic cell death in tumor cells, a process modulated by a JNK-dependent Atg4 upregulation involving ROS production.

CAS Number: 63631-36-7 Molecular Formula: $C_{32}H_{30}N_2O_4$ Molecular Weight: 506.6 Source: Aspergillus sp. Purity: >95% by HPLC

Aspochalasin D



Code No.: BIA-A1642 Pack Sizes: 1 mg, 5 mg



Aspochalasin D is a potent inhibitor of mammalian tumor cell lines, first isolated from Aspergillus microcysticus by Keller-Schierlein and co-worker in 1979. While known to be an epimer of aspochalasin C, the stereochemistry was not resolved until Hayakawa and co-workers at University of Tokyo re-isolated the metabolite as a selective apoptosis inducer in Ras-dependent pathways in 2001.

CAS Number: 71968-02-0 Molecular Formula: $C_{24}H_{35}NO_4$ Molecular Weight: 401.5 Source: Aspergillus sp. Purity: >95% by HPLC

Aspochalasin M



Code No.: BIA-A1644 Pack Sizes: 0.5 mg, 2.5 mg



Aspochalasin M is a minor analogue of the aspochalasin class of anti-tumor actives discovered by researchers at the Institute of Marine Drugs and Food, China in 2009. Aspochalasin M was isolated from Spicaria elegans using an OSMAC (one species many compounds) fermentation strategy to explore the biosynthetic potential of the fungus. Interestingly, aspochalasin M itself was inactive against several tumor cell lines.

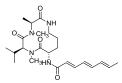
CAS Number: 1173040-34-0 Molecular Formula: $C_{24}H_{35}NO_4$ Molecular Weight: 401.5 Source: Aspergillus sp. Purity: >95% by HPLC



Aspochracin



Code No.: BIA-A1717 Pack Sizes: 0.5 mg, 2.5 mg



Aspochracin is an insecticidal non-proteogenic cyclic tripeptide first isolated from Aspergillus ochraceus by Myokei and co-workers at University of Tokyo in 1969. The same authors elucidated its structure which comprises N-methylalanine, N-methylvaline and ornithine cyclised through the δ rather than the α -amino group. The α -amino moiety is acylated with an octa-2,4,6-trienoic acid. Aspochracin is non-toxic to mammalian cell lines and its biological activity is largely unexplored.

CAS Number: 22029-09-0 Molecular Formula: $C_{23}H_{36}N_4O_4$ Molecular Weight: 432.6

Source: Aspergillus sp.
Purity: >95% by HPLC

Asterric Acid

Code No.: BIA-A1008 Pack Sizes: 1 mg, 5 mg

Asterric acid is a fungal metabolite with anti-angiogenic properties, isolated from a number of Aspergillus and Penicillium species. It is an inhibitor of vascular endothelial growth factor (VEGF), inhibiting VEGF-induced tube formation of human umbilical vein endothelial cells.

CAS Number: 577-64-0 Molecular Formula: $C_{17}H_{16}O_8$ Molecular Weight: 348.3

Source: Aspergillus terreus
Purity: >99% by HPLC

Asterriquinol D dimethylether



Code No.: BIA-A1630 Pack Sizes: 1 mg, 5 mg

H₃CO OCH₃

Asterriquinol D dimethylether was first isolated from Aspergillus terreus as part of the asterriquinone complex, reported by Yamamoto and colleagues at Kanazawa University in 1981. Asterriquinol D dimethylether was recently reported as a useful chemotaxonomic marker for a novel Aspergillus species, A. kumbius. Asterriquinol D dimethylether has weak activity against tumor cells and the parasitic protozoan, Tritrichomonas foetus.

CAS Number: 287117-66-2 Molecular Formula: $C_{26}H_{24}N_2O_4$ Molecular Weight: 428.5

Source: Penicillium citreonigrum

Purity: >95% by HPLC

Asukamycin

Code No.: BIA-A1600 Pack Sizes: 0.5 mg, 2.5 mg

Asukamycin is an unusual trienoic acid amide metabolite produced by Streptomyces nodosus, reported by Omura and colleagues at the Kitasato Institute, Japan in 1976. Asukamycin belongs to the manumycin class that comprises two trienoic acid amides pivoted on a central cyclohexenone ring to give the molecule an unprecedented angular geometry. Asukamycin is active against Gram positive bacteria, tumor cell lines and protozoans, notably coccidia. Asukamycin's cell toxicity is accompanied by activation of caspases 3 and 8.

CAS Number: 61116-33-4 Molecular Formula: $C_{31}H_{34}N_2O_7$ Molecular Weight: 546.6

Source: Streptomyces sp. Purity: >95% by HPLC

Aszonalenin



Code No.: BIA-A1686 Pack Sizes: 1 mg, 5 mg

Aszonalenin is a complex benzodiazepine metabolite isolated from Aspergillus zonatus by Kimura and co-workers at Tottori University, Japan in 1982. Structurally, aszonalenin is formed from an intra-molecular ring closure of anthranilic acid and L-tryptophan to form the pyrrole, followed by prenylation. At high concentration aszonalenin has been shown to induce an abnormal second cleavage of sea urchin embryos but its pharmacology has otherwise received scant attention.

CAS Number: 81797-27-5
Molecular Formula: C23H23N3O2
Molecular Weight: 373.5

Source: Neosartorya spinosa
Purity: >95% by HPLC

Aurantiogliocladin



Code No.: BIA-A1654 Pack Sizes: 1 mg, 5 mg



Aurantiogliocladium is an orange-coloured benzoquinone isolated from a strain of Gliocladium roseum reported by researchers at ICI, England in 1951. The structure of aurantiogliocladin was resolved by Vischer two years later. Aurantiogliocladin exhibits weak to moderate antibacterial and antifungal activity, however the metabolite's bioactivity has received little further attention.

CAS Number: 483-54-5 Molecular Formula: $C_{10}H_{12}O_4$ Molecular Weight: 196.2

Source: Gliocladium sp.
Purity: >95% by HPLC

Aureothin

Code No.: BIA-A1009 Pack Sizes: 0.5 mg, 2.5 mg

Aureothin, an unusual pyranone metabolite, has broad biological actions including antitumor, antimicrobial and insecticidal activities. Aureothin acts by inhibiting oxidoreductase. More recently, aureothin has been shown to be a potent inhibitor of Helicobacter pylori.

 $\begin{array}{lll} \text{CAS Number:} & 2825\text{-}00\text{-}5 \\ \text{Molecular Formula:} & C_{22}H_{23}NO_6 \\ \text{Molecular Weight:} & 397.4 \\ \end{array}$

Source: Streptomyces sp. Purity: >95% by HPLC

Aureothricin

Code No.: BIA-A1120 Pack Sizes: 0.5 mg, 2.5 mg

Aureothricin is an antibiotic first described by Umezawa and coworkers in Japan in 1949. Resurgent interest in this class of microbial metabolites was stimulated by the discovery of their selective antitumor activity. Aureothricin is a more hydrophobic analogue of thiolutin, but has received only limited attention. Members of this class, notably thiolutin, are potent inhibitors of bacterial and yeast RNA polymerases, inhibitors of mannan and glucan formation in fungi, and inhibitors of tumor-cell induced angiogenesis in vivo.

CAS Number: 574-95-8 Molecular Formula: $C_9H_{10}N_2O_2S_2$ Molecular Weight: 242.3

Source: Streptomyces sp. Purity: >98% by HPLC

Aureusimine B

Code No.: BIA-A1309 Pack Sizes: 1 mg, 5 mg

Aureusimine B (phevalin) is a small molecular weight monoketopiperazine formed non-ribosomally by the fusion of phenylalanine and valine. Aureusimine B was isolated from S.

aureus in 2010 as one of a pair of related metabolites, controversially identified as virulence factors in the pathology of Golden Staph. Aureusimine B is also an inhibitor of the protease, calpain.

CAS Number: 170713-71-0 Molecular Formula: $C_{14}H_{16}N_2O$ Molecular Weight: 228.3 Source: Synthetic Purity: >95% by HPLC

Avenaciolide

Code No.: BIA-A1409 Pack Sizes: 0.5 mg, 2.5 mg

Avenaciolide, a bicyclic bis-butyrolactone, was isolated from Aspergillus avenaceus in 1963 as an antifungal agent. Avenaciolide inhibits glutamate transport and is also thought to act as an atypical ionophore.

CAS Number: 16993-42-3 Molecular Formula: $C_{15}H_{22}O_4$ Molecular Weight: 266.3 Source: Aspergillus sp.

Source: Aspergillus sp. Purity: >95% by HPLC

Avermectin B1a

Code No.: BIA-A1010 Pack Sizes: 5 mg, 25 mg

Avermectin B1a is the major component (>80%) of a commercially available anthelmintic used to control parasitic nematodes in livestock. Avermectin B1a contains a sec-butyl residue in the 25-position. In vitro and in vivo studies have shown that this analogue is the more potent analogue in the commercial product.

CAS Number: 65195-55-3 Molecular Formula: $C_{48}H_{72}O_{14}$ Molecular Weight: 873.1

Source: Streptomyces avermitilis

Purity: >99% by HPLC

Avermectin B1a aglycone

Code No.: BIA-A1587 Pack Sizes: 1 mg, 5 mg

Avermectin aglycone is an acid degradation product produced by hydrolysis of the disaccharide unit of avermectin. Avermectin aglycone is an inhibitor of nematode larval development, but is



devoid of paralytic activity. Despite the importance of avermectin as an anthelmintic in animal health, there are few published reports of the biological activity or the levels of avermectin aglycone in animals or in the environment.

CAS Number: 71828-14-3 Molecular Formula: C34H48O8 Molecular Weight: 584.7

Semi-synthetic Source: Purity: >95% by HPLC

Avermectin B1a monosaccharide

Code No.: BIA-A1585 Pack Sizes: 1 mg, 5 mg

Avermectin monosaccharide is an acid degradation product produced by selective hydrolysis of the terminal saccharide unit of avermectin. Avermectin monosaccharide is a potent inhibitor of nematode larval development, but is devoid of paralytic activity. Despite the importance of avermectin as an anthelmintic in animal health, there are few published reports of the biological activity or the levels of avermectin monosaccharide in animals or in the environment.

71831-09-9 CAS Number: Molecular Formula: $C_{41}H_{60}O_{11}$ Molecular Weight: 728.9 Semi-synthetic Source: >95% by HPLC Purity:

Δ²-Avermectin B1a

Code No.: BIA-A1579 Pack Sizes: 1 mg, 5 mg

 Δ^2 -Avermectin B1a is an irreversible base degradation product of avermectin found in animals treated with avermectin and in the environment, Δ^2 -Avermectin B1a is formed by rearrangement of the naturally-occurring Δ^3 -group to the 2-position. Although less active than the parent, Δ^2 -avermectin B1a is active at 1 ppm.

CAS Number:

Molecular Formula: C48H72O14 Molecular Weight: 873.1

Source: Semi-synthetic >95% by HPLC Purity:

epi-Avermectin B1a

bioaustralis

fine chemicals

Code No.: BIA-A1576 Pack Sizes: 1 mg, 5 mg

epi-Avermectin B1a is a base-catalysed intermediate in the decomposition of avermectin B1a. epi-Avermectin B1a is formed by epimerisation at the 2-position which ultimately rearranges irreversibly to the isomeric alkene analogue, Δ^2 -avermectin B1a. epi-Avermectin B1a is only very weakly active as a nematocide showing ~100-fold loss of biological activity compared with the parent avermectin. epi-Avermectin B1a is formed in vivo following treatment with avermectin and is an environmental degradation

CAS Number: 106434-14-4 Molecular Formula: C48H72O14 Molecular Weight: 873.1 Source: Semi-synthetic

Avermectin B1b

Purity:

Code No.: **BIA-A1011** Pack Sizes: 0.5 mg, 2.5 mg

>95% by HPLC

Avermectin B1b is the minor component (<20%) of a commercially available anthelmintic used to control parasitic nematodes in livestock. Avermectin B1b contains an isopropyl residue in the 25position. In vitro and in vivo studies have shown this analogue to be active, but less potent than the B1a analogue

CAS Number: 65195-56-4 Molecular Formula: C47H70O14 Molecular Weight: 859.1

Streptomyces avermitilis Source:

>99% by HPLC Purity:

Azamulin

Code No.: BIA-A1489 Pack Sizes: 1 mg, 5 mg

Azamulin is a semi-synthetic pleuromutilin prepared by sequential reaction of dihydropleuromutilin tosylate with 2-amino-1,2,4triazole-5-thiol. While azamulin is a broad spectrum antibiotic in the pleuromutilin class, this aspect of its bioprofile has received little attention. In fact, the triazole substituent added to nominally improve the drug's bioavailability, imparted an unusual selectivity for the inhibition of specific cytochrome P450 mixed function oxidase sub-types, important for understanding the manner in which the body metabolises drugs or xenobiotics.

76530-44-4 CAS Number: Molecular Formula: $C_{24}H_{38}N_4O_4S$ Molecular Weight: 478.7 Source: Semi-synthetic Purity: >99% by HPLC

Azidamfenicol

Code No.: BIA-A1485 Pack Sizes: 1 mg, 5 mg

$$O_2N \xrightarrow{OH} H \\ OH \\ OH$$

Azidamfenicol is a semi-synthetic chloramphenicol in which the nitro moiety is replaced with a methylsulphone and the dichloroacetamide is replaced with azidoacetamide, first synthesised at Bayer in 1959. Azidamfenicol is a broad spectrum antibiotic with good activity against Gram negative and anaerobic bacteria. Azidamfenicol acts by binding to the 23S sub-unit of the 50S ribosome, inhibiting protein synthesis. Azidamfenicol has received little research attention with only a few literature citations.

CAS Number: 13838-08-9 Molecular Formula: $C_{11}H_{13}N_5O_5$ Molecular Weight: 295.3 Source: Synthetic Purity: >99% by HPLC

Azithromycin

Code No.: BIA-A1312 Pack Sizes: 5 mg, 25 mg

Azithromycin is a semi-synthetic, ring-expanded erythromycin produced by a Beckmann rearrangement of erythromycin oxime and reduction to the imine ether, followed by reductive methylation. Azithromycin was the first of the azalides and was designed to improve the stability and biological half-life of erythromycin A, as well as improve activity against Gram negative bacteria. Since its discovery in 1980 by Djokic and co-workers, azithromycin has enjoyed considerable therapeutic success.

CAS Number: 83905-01-5 Molecular Formula: $C_{38}H_{72}N_2O_{12}$ Molecular Weight: 749.0 Source: Semi-synthetic Purity: >98% by HPLC

Azomycin

NEW

Code No.: BIA-A1690 Pack Sizes: 5 mg, 25 mg

N NO_2

Azomycin is a small heterocyclic imidazole first isolated from a species of Nocardia by Umezawa's group in 1953 as an antibiotic with activity against Gram positive and Gram negative species. The structure was resolved as 2-nitroimidazole in 1955 and readily synthesized from 2-aminoimidazole in 1965. Azomycin is present in other bacterial genera, Streptomyces and Pseudomonas. In 1956, it was reported to have antiprotozoan activity. Subsequent research focused on activity against anaerobic bacteria including Clostridium perfringens and Bacteroides fragilis.

CAS Number: 527-73-1Molecular Formula: $C_3H_3N_3O_2$ Molecular Weight: 113.1Source: Nocardia sp.
Purity: >95% by HPLC

Bacillosporin C



Code No.: **BIA-B1665** Pack Sizes: **1 mg, 5 mg**

Bacillosporin C is a dimeric oxaphenalenone antibiotic isolated from Talaromyces bacillosporus by researchers at Chiba University in 1980. The strucure of bacillosporin C was formally published by Lin and co-workers in 2007. Bacillosporin C is a member of the oxaphenalenone class as reviewed in 2013. Bacillosporins have antibiotic and antitumor activities and inhibit acetylcholinesterase.

CAS Number: 76706-63-3 Molecular Formula: $C_{26}H_{18}O_{10}$ Molecular Weight: 490.4 Source: Aspergillus sp. Purity: >95% by HPLC

Bafilomycin A1

Code No.: BIA-B1012 Pack Sizes: 1 mg, 5 mg

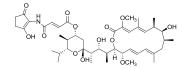
Bafilomycin A1 is a member of a potent family of macrocyclic lactones with broad spectrum biological activity, including activity against bacteria, yeast, fungi, nematodes, insects and tumor cell lines. Bafilomycin A1 is an inhibitor of vacuolar-type ATPase.

CAS Number: 88899-55-2 Molecular Formula: C₃₅H₅₈O₉ Molecular Weight: 622.8

Source: Streptomyces sp. Purity: >95% by HPLC

Bafilomycin B1

Code No.: BIA-B1110 Pack Sizes: 1 mg, 5 mg



Bafilomycin B1 is a member of a potent family of macrocyclic lactones. Bafilomycin B1 shares the same mode of action and activity as its more accessible A1 analogue. Bafilomycin B1 is broadly active against bacteria, fungi, insects, nematodes and protozoans. Bafilomycin B1 has attracted interest as a potential agent for treating osteoporosis.



CAS Number: 88899-56-3 Molecular Formula: $C_{44}H_{65}NO_{13}$ Molecular Weight: 816.0

Source: Streptomyces sp. Purity: >95% by HPLC

Bafilomycin C1

Code No.: BIA-B1111 Pack Sizes: 1 mg, 5 mg

Bafilomycin C1 is a member of a potent family of macrocyclic lactones. Bafilomycin C1 shares a similar mode of action and activity as its more accessible A1 analogue. Bafilomycin C1 is broadly active against bacteria, fungi, insects, nematodes and cestodes. Bafilomycin C1 has attracted interest as a potential agent for treating osteoporosis. The presence of the fumarate group provides an ideal ligand for affinity chromatography of V-ATPase.

CAS Number: 88979-61-7 Molecular Formula: $C_{39}H_{60}O_{12}$ Molecular Weight: 734.9

Source: Streptomyces sp. Purity: >95% by HPLC

Bafilomycin D

Code No.: BIA-B1162 Pack Sizes: 1 mg, 5 mg

Bafilomycin D is a member of a potent family of macrocyclic lactones. Bafilomycin D shares the same mode of action as bafilomycin A1 which has been the analogue of choice in cell biology studies of the role of ATPase. Bafilomycin D contains the ring-opened side chain and is a much more stable analogue of bafilomycin A1. Limited availability has restricted a more in depth investigation of this metabolite.

CAS Number: 98813-13-9 Molecular Formula: $C_{35}H_{56}O_{8}$ Molecular Weight: 604.8

Source: Streptomyces sp. Purity: >99% by HPLC

Bassianolide

Code No.: **BIA-B1557** Pack Sizes: **0.5 mg, 2.5 mg**

Bassianolide is a cyclooctadepsipeptide insecticide isolated from the entomopathogenic fungi, Beauveria and Verticillium lecanii, first reported by researchers at University of Tokyo in 1978. Bassianolide is related to the insecticidal and nematocidal actives, PF1022 complex and the synthetic anthelminthic emodepside. While the mode of action of bassianolide is not fully resolved, it is thought to act on ion channels at the level of the neuromuscular junction, like emodepside. Bassianolide is one of the active components of Beauveria bassiana biocontrol products.

CAS Number: 64763-82-2 Molecular Formula: C₄₈H₈₄N₄O₁₂ Molecular Weight: 909.2

Source: Beauveria bassiana
Purity: >95% by HPLC

Beauvericin

Code No.: BIA-B1238 Pack Sizes: 5 mg, 25 mg

Beauvericin is a cyclic depsipeptide isolated from several fungal genera, notably Beauveria and Fusarium, first reported in 1969. Beauvericin exhibits broad antifungal, antibacterial, antiprotozoan and insecticidal activities. At the molecular level, beauvericin exhibits ionophore properties, and inhibits acyl-CoA:cholesterol acyltransferase activity. Beauvericin induces apoptosis by elevating intracellular calcium levels.

CAS Number: 26048-05-5 Molecular Formula: $C_{45}H_{57}N_3O_9$ Molecular Weight: 784.0

Source: Beauveria bassiana
Purity: >97% by HPLC

Benzomalvin A



Code No.: BIA-B1647 Pack Sizes: 1 mg, 5 mg

Benzomalvin A was isolated as an active inhibitor of substance P binding to mammalian neurokinin NK1 receptors by researchers at Sterling Winthrop Pharmaceuticals (now Sanofi Aventis). The core benzodiazepine structure of benzomalvin A is formed biosynthetically by the condensation of two molecules of anthranilic acid and a phenylalanine. Benzomalvin A is related to the asperlicins, potent and selective antagonists of peripheral cholecystokinin receptors. Lack of availability has hampered further exploration of the pharmacology of benzomalvin A.

CAS Number: 157047-96-6 Molecular Formula: $C_{24}H_{19}N_3O_2$ Molecular Weight: 381.4 Source: Penicillium sp. Purity: >95% by HPLC

Benzomalvin B



Code No.: BIA-B1646 Pack Sizes: 1 mg, 5 mg



Benzomalvin B was first isolated as a weakly active inhibitor of substance P from mammalian neurokinin NK1 receptors by researchers at Sterling Winthrop Pharmaceuticals (now Sanofi Aventis) in 1994. The core benzodiazepine structure of benzomalvin B is formed biosynthetically by the condensation of two molecules of anthranilic acid and phenylalanine. Benzomalvin B is related to the asperlicins, potent and selective antagonists of peripheral cholecystokinin receptors. Lack of availability has hampered further exploration of benzomalvin B's pharmacology.

CAS Number: 157047-97-7 Molecular Formula: $C_{24}H_{17}N_3O_2$ Molecular Weight: 379.4 Source: Penicillium sp. Purity: >95% by HPLC

Benzomalvin C



Code No.: BIA-B1679 Pack Sizes: 1 mg, 5 mg

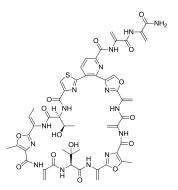
Benzomalvin C was isolated as an active inhibitor of substance P binding to mammalian neurokinin NK1 receptors by researchers at Sterling Winthrop Pharmaceuticals (now Sanofi Aventis). The core benzodiazepine structure is formed biosynthetically by the condensation of two molecules of anthranilic acid and a phenylalanine. Benzomalvin C is a weak inhibitor of indoleamine 2,3-dioxygenase, an enzyme catalysing the addition of oxygen across the C-2/C-3 bond of the indole ring of tryptophan. T-cell lymphocytes are sensitive to tryptophan shortage, inducing cell cycle arrest at G1, apoptosis and immunosuppression.

 $\begin{array}{lll} \text{CAS Number:} & 157047\text{-}98\text{-}8 \\ \text{Molecular Formula:} & C_{24}H_{17}N_3O_3 \\ \text{Molecular Weight:} & 395.4 \\ \end{array}$

Source: *Penicillium* sp. Purity: >95% by HPLC

Berninamycin A

Code No.: **BIA-B1121** Pack Sizes: **1 mg, 5 mg**



Berninamycin A is an antibiotic discovered in 1976 from a strain of Streptomyces. Berninamycin A is a macrocyclic "peptide" comprising atypical amino acids linked to thiazole and oxazoles. Chemically very complex, berninamycin A is an inducer of tipA, a gene that controls the bacterial transcription regulators, TipAL and TipAS, that are central to multidrug resistance. Berninamycin A is closely related to siomycin, a recently discovered inhibitor of oncogenic transcription factor, FoxM1.

CAS Number: 58798-97-3 Molecular Formula: $C_{51}H_{51}N_{15}O_{15}S$ Molecular Weight: 1146.1

Source: Streptomyces sp. Purity: >99% by HPLC

Berninamycin D

Code No.: **BIA-B1147** Pack Sizes: **0.5 mg, 2.5 mg**

Berninamycin D is an antibiotic isolated in 1994 from a strain of Streptomyces as a minor analogue of berninamycin A. Berninamycin D is a macrocyclic "peptide" comprising atypical amino acids linked to thiazole and oxazoles but does not contain the didehydroalaninyl side chain present in other members of this class. The implications of the absence of this side chain are unknown and lack of availability has prevented a fuller investigation of this metabolite.

 $\begin{array}{lll} \text{CAS Number:} & 161263\text{-}50\text{-}9 \\ \text{Molecular Formula:} & \text{C}_{45}\text{H}_{45}\text{N}_{13}\text{O}_{13}\text{S} \\ \text{Molecular Weight:} & 1008.0 \\ \end{array}$

Source: Streptomyces sp. Purity: >99% by HPLC

Bestatin

Code No.: BIA-B1278 Pack Sizes: 5 mg, 25 mg

Bestatin is "pseudo"-dipeptide isolated from Streptomyces olivreticuli in 1976. Bestatin is a potent aminopeptidase B inhibitor with no carboxypeptidase activity. Bestatin acts as an immunomodulator by activating macrophages and T lymphocytes. Bestatin also exhibits antitumor activity and has been investigated in clinical trials.

 $\begin{array}{lll} \text{CAS Number:} & 58970\text{-}76\text{-}6 \\ \text{Molecular Formula:} & C_{16}\text{H}_{24}\text{N}_{2}\text{O}_{4} \\ \text{Molecular Weight:} & 308.4 \\ \end{array}$

Source: Streptomyces sp. Purity: >98% by HPLC



Biapenem



Code No.: BIA-B1663 Pack Sizes: 5 mg, 25 mg

Biapenem is semi-synthetic amphoteric carbapenem antibiotic synthesised and commercially developed in the late 1990s by Japanese researchers at Lederle (now Pfizer). Biapenem possesses a broad antibacterial spectrum of action including anaerobes and is stable to most β -lactamases. Biapenem is more stable against hydrolysis by human renal dehydropeptidase-I (DHP-I) than other penems, such as meropenem, imipenem and panipenem. The improved dehydropeptidase activity is attributed to the presence of the 1- β -methyl moiety.

CAS Number: 120410-24-4 Molecular Formula: $C_{15}H_{18}N_4O_4S$ Molecular Weight: 350.4 Source: Synthetic Purity: >95% by HPLC

Bicyclomycin

Code No.: BIA-B1367 Pack Sizes: 1 mg, 5 mg

Bicyclomycin is a polar metabolite first isolated from Streptomyces sapporonensis in 1972. The selective Gram negative profile of bicyclomycin is rare among Streptomyces metabolites. The primary site of action for bicyclomycin is thought to be the rho transcription termination factor.

CAS Number: 38129-37-2 Molecular Formula: $C_{12}H_{18}N_2O_7$ Molecular Weight: 302.3

Source: Streptomyces sp. Purity: >95% by HPLC

Bicyclomycin benzoate

Code No.: BIA-B1318 Pack Sizes: 5 mg, 25 mg

Bicyclomycin is a polar metabolite first isolated from Streptomyces sapporonensis in 1972, with activity against Gram negative bacteria. The selective Gram negative profile of bicyclomycin is rare among Streptomyces metabolites, and in an effort to overcome its poor in vivo absorption, the benzoate ester was prepared by reaction with the more exposed primary alcohol. Bicyclomycin benzoate has limited use as a veterinary antibiotic.

CAS Number: 37134-40-0
Molecular Formula: C₁₉H₂₂N₂O₈
Molecular Weight: 406.4

Source: Semi-synthetic Purity: >99% by HPLC

Biochanin A



Code No.: BIA-B1724 Pack Sizes: 5 mg, 25 mg

Biochanin A is an isoflavone found widely in legume and other plant species. It is sporadically found in microbial fermentations containing soy or other related plant-based extracts. Like genestein, biochanin A has been widely reported as an antibacterial, insect anti-feedant and anticancer active. It also has an oestrogenic, bond protective and antioxidant activity. The occurence and diverse pharmacological activity of biochanin A makes it an essential dereplication and bioassay standard in microbial natural product discovery.

CAS Number: 491-80-5Molecular Formula: $C_{16}H_{12}O_5$ Molecular Weight: 284.3Source: Glycine sp.
Purity: >95% by HPLC

Bischloroanthrabenzoxocinone

Code No.: BIA-B1163 Pack Sizes: 0.5 mg, 2.5 mg

Bischloroanthrabenzoxocinone ((-)BABX) is a selective inhibitor of Type II fatty acid synthesis (FASII). BABX showed IC50 values of 11.4 and 35.3 $\mu g/ml$ in the S. aureus and E. coli FASII assays, respectively. FASII is essential to bacterial cell viability and is a promising target for the development of novel antibiotics. More recently, BABX has been shown to inhibit agonist binding to Liver X receptors (LXR) which regulate the expression of the ABCA1 gene, mediating the efflux of cholesterol from cells.

CAS Number: 866022-28-8 Molecular Formula: $C_{28}H_{24}O_7Cl_2$ Molecular Weight: 543.4

Source: Streptomyces sp. Purity: >99% by HPLC

Blasticidin A

Code No.: BIA-B1145 Pack Sizes: 1 mg, 5 mg

Blasticidin A is a high molecular weight tetramic acid with broad spectrum antifungal and antibacterial activity, first reported in 1955. Like many tetramic acids, blasticidin A is isolated as the stable calcium salt/complex. Blasticidin A and closely related aflastatin A are specific inhibitors of the production of the mycotoxin, aflatoxin, by Aspergillus parasiticus.

CAS Number: 100513-53-9
Molecular Formula: C₅₈H₁₀₇NO₂₃



Molecular Weight: 1186.5

Source: Streptomyces sp. Purity: >95% by HPLC

Blasticidin S

Code No.: BIA-B1425 Pack Sizes: 1 mg, 5 mg

H₂N NH₂ NH₂

Blasticidin S is a nucleoside produced by several species of Streptomyces, first reported in the late 1950s. Blasticidin S is an antifungal agent with particularly potent activity against the rice pathogen, Piricularia oryzae, for which it was used commercially for some time in Japan. Blasticidin S inhibits protein synthesis and is active against bacteria, tumor cell lines and nematodes. More recently, blasticidin S has been used as a marker for strain manipulations. BioAustralis provides Blasticidin S as the free base to avoid problems associated with use of the hydrochloride.

CAS Number: 2079-00-7 Molecular Formula: $C_{17}H_{26}N_8O_5$ Molecular Weight: 422.4

Source: Streptomyces sp. Purity: >98% by HPLC

Blasticidin S hydrochloride

Code No.: BIA-B1426 Pack Sizes: 1 mg, 5 mg

H₂N , NH₂ NH₂* CI NH₂ NH₂* CI NH₂ NH₂* CI NH₂ NH₂

Blasticidin S hydrochloride, the salt of blasticidin S, is an amphoteric nucleoside produced by several species of Streptomyces, first reported in the late 1950s. For historical reasons only the salt has been routinely available to researchers. Both the salt and free base are freely water soluble. Blasticidin S is an antifungal agent with particularly potent activity against the rice pathogen, Piricularia oryzae, for which it was used commercially in Japan. Blasticidin S inhibits protein synthesis and is active against bacteria, tumor cell lines and nematodes. Blasticidin S has been used as a marker for strain manipulations.

CAS Number: 3513-03-9 Molecular Formula: $C_{17}H_{27}CIN_8O_5$ Molecular Weight: 458.9

Source: Streptomyces sp. Purity: >98% by HPLC

Bleomycin complex

Code No.: BIA-B1203 Pack Sizes: 10 mg, 50 mg

NH₂ NH₂

Bleomycin is a complex of 11 glycopeptide antitumor antibiotics originally isolated from Streptomyces verticillus in 1972. The dominant components of the complex are bleomycin A2 and B2, which typically represent >90% of the total weight. Bleomycins have found clinical application in the treatment of a range of tumors. Bleomycins act by intercalation of DNA and RNA. In the presence of oxygen and metal ions, notably copper and iron, bleomycins form a pseudo-enzyme that induces DNA cleavage.

CAS Number: 9041-93-4

Molecular Formula: $C_{55}H_{84}N_{17}O_{21}S_3$ (for A2)

Molecular Weight: 1415.6

Source: Streptomyces sp. Purity: >99% by HPLC

Borrelidin

Code No.: **BIA-B1013** Pack Sizes: **0.5 mg, 2.5 mg**

Borrelidin is an unusual nitrile-containing metabolite isolated from Streptomyces. Originally discovered as active against Borrelia species, borrelidin has since found a role as a selective inhibitor of bacterial and eukaryal threonyl-tRNA synthetase. More recent research has found that borrelidin is a very potent angiogenesis inhibitor and induces apoptosis of the capillary tube-forming cells. Borrelidin is an important lead for antimalarial discovery, displaying activity against drug-resistant Plasmodia.

CAS Number: 7184-60-3 Molecular Formula: $C_{28}H_{43}NO_6$ Molecular Weight: 489.6

Source: Streptomyces sp. Purity: >99% by HPLC

Brefeldin A

Code No.: BIA-B1122 Pack Sizes: 5 mg, 25 mg

Brefeldin A is a potent inhibitor of cell growth first described in 1958, then independently rediscovered by several groups as a potent active in a broad range of bioassays. Brefeldin has antiviral, antibiotic, antifungal, antitumor and herbicidal activity. Early studies on the mode of action of brefeldin identified inhibition of protein and nucleic acid synthesis by disruption of the Golgi apparatus. The precise molecular target is a subset of Sec7-type GTP exchange factors (GEFs) that activate a small GTPase, Arf1p, an integral component of protein trafficking and signalling.

CAS Number: 20350-15-6 Molecular Formula: $C_{16}H_{24}O_4$ Molecular Weight: 280.4 Source: Curvularia sp. Purity: >99% by HPLC

Brevianamide F

NEW

Code No.: BIA-B1715 Pack Sizes: 5 mg, 25 mg



Brevianamide F (cyclo(L-Pro-L-Trp)) is a diketopiperazine metabolite isolated from a fermentation of Penicillium brevicompactum by Birch and co-workers in 1970. The structure of brevianamide F was elucidated by the same group two years later. Brevianamide F was subsequently reported as a metabolite common to a number of bacteria and fungi. It is therefore a useful standard for chemical and bioassay dereplication. Brevianamide F exhibits broad spectrum antibacterial activity and enhances the maturation of mammalian cells.

CAS Number: 38136-70-8 Molecular Formula: $C_{16}H_{17}N_3O_2$ Molecular Weight: 283.3 Source: Penicillium sp. Purity: >95% by HPLC

Brevicompanine B

Code No.: BIA-B1176 Pack Sizes: 1 mg, 5 mg

Brevicompanine B is a diketopiperazine-related metabolite produced by Penicillium and Aspergillus species. Brevicompanine B is active against the malaria parasite, Plasmodium falciparum, and shows pronounced plant growth regulatory activity but is devoid of antifungal or antibacterial activity.

CAS Number: 215121-47-4 Molecular Formula: $C_{22}H_{29}N_3O_2$ Molecular Weight: 367.5 Source: Penicillium sp.

Purity: >99% by HPLC

Bromamphenicol

Code No.: BIA-B1490 Pack Sizes: 5 mg, 25 mg

Bromamphenicol is a semi-synthetic chloramphenicol analogue first reported in 1950, in which the dichloroacetamide is replaced with dibromoacetamide. Bromamphenicol possesses weak antibiotic activity. Comparative crystallography with chloramphenicol helped defined the SARs of the acetamide binding region on the ribosome. More recently, this relationship was used to demonstrate that chloramphenicol binding to DraE virulence factors in Gram negative bacteria was independent of the chloramphenicol binding site on the ribosome.

 $\begin{array}{lll} \text{CAS Number:} & 16803\text{-}75\text{-}1 \\ \text{Molecular Formula:} & C_{11}\text{H}_{12}\text{Br}_2\text{N}_2\text{O}_5 \\ \text{Molecular Weight:} & 412.0 \\ \end{array}$

Source: Semi-synthetic Purity: >99% by HPLC

Bromothricin

Code No.: BIA-B1623 Pack Sizes: 1 mg, 5 mg

Bromothricin is a directed biosynthetic analogue of chlorothricin, produced by a chlorothricin-producing strain of Streptomyces antibioticus using media supplemented with potassium bromide. The bromide preferentially replaces the chlorine in the benzoate ester, yielding bromothricin as the dominant metabolite. Bromothricin was first fermented and isolated by Zahner and colleagues in 1989 at the University of Tubingen in Germany. Bromothricin exhibits similar properties to chlorothricin.

CAS Number:

 $\begin{tabular}{ll} Molecular Formula: & $C_{50}H_{63}BrO_{16}$ \\ Molecular Weight: & 999.9 \\ \end{tabular}$

Source: Streptomyces sp. Purity: >95% by HPLC

Butyrolactone I

Code No.: BIA-B1406 Pack Sizes: 1 mg, 5 mg

Butyrolactone I is one of a family of three butyrolactones isolated from Aspergillus fumigatus, first reported in 1983. Butyrolactone I exhibits antitumor activity, inhibiting the cell cycle at the G1/S and G2/M transitions. Butyrolactone I is a selective inhibitor of cyclin-dependent kinases CDK1/cyclin B, CDK2 and CDK5, and is an important bioprobe for understanding the cellular roles of CDKs.

CAS Number: 87414-49-1 Molecular Formula: $C_{24}H_{24}O_7$ Molecular Weight: 424.5 Source: Aspergillus sp.

Purity: >95% by HPLC

Butyryl-L-homoserine lactone

Code No.: BIA-B1494 Pack Sizes: 5 mg, 25 mg

Butyryl-L-homoserine lactone is a short acylhomoserine lactone isolated from Pseudomonas aeruginosa in 1995 and demonstrated to be a quorum sensing modulator in biofilms. Acylhomoserine lactones have been detected in hundreds of bacterial species and, while the homologues vary between species and strains, the homoserine lactones are the major chemical modulators of within



and between cell communication and regulation. The most significant variable defining the function of the homoserine lactone is the length of the acyl chain, with shorter chains displaying opposing actions to the longer chains.

CAS Number: 67605-85-0 Molecular Formula: $C_8H_{13}NO_3$ Molecular Weight: 171.2 Source: Synthetic Purity: >99% by HPLC

Caerulomycin

Code No.: BIA-C1373 Pack Sizes: 1 mg, 5 mg

Caerulomycin is a rare and unusual antibiotic containing a core 2, 2'-bispyridyl with an oxime substituent, produced by a strain of Streptomyces caeruleus isolated in Canada in 1959. Caerulomycin is active against fungi and some protozoans, and is weakly active against bacteria. While its discovery has stimulated some synthetic effort, little is known about the mode and spectrum of action of caerulomycin.

CAS Number: 21802-37-9 Molecular Formula: $C_{12}H_{11}N_3O_2$ Molecular Weight: 229.2

Source: Streptomyces sp. Purity: >98% by HPLC

Caffeic acid

NEW

Code No.: BIA-C1727 Pack Sizes: 5 mg, 25 mg

Caffeic acid is a common plant metabolite, found in barley and rye, biosynthetically formed by hydrolysis of chlorogenic acid. Caffeic acid is a member of the phenylpropanoid class of lignin biosynthetic precursors. The biochemical and pharmacological activity of caffeic acid has > 20,000 SciFinder entries and the area is well reviewed by Guzman (2014) and Sharma (2011). Caffeic acid a useful standard for analytical and bioassay dereplication as a metabolite commonly encountered in microbial fermentations.

CAS Number: 331-39-5 Molecular Formula: $C_9H_8O_4$ Molecular Weight: 180.2 Source: Synthetic Purity: >95% by HPLC

Calcimycin

Code No.: BIA-C1236 Pack Sizes: 1 mg, 5 mg

Calcimycin is a potent calcium ionophore isolated from Streptomyces chartreusis in 1974. Calcimycin is a spiroketal substituted by pyrollic and benzoxazolyl groups which afford its high affinity and selectivity for calcium. Calcimycin exhibits broad biological activity against bacteria, fungi and protozoa. It has found wide application as a research tool for calcium-regulated cellular events.

CAS Number: 52665-69-7 Molecular Formula: $C_{29}H_{37}N_3O_6$ Molecular Weight: 523.6

Source: Streptomyces chartreusis

Purity: >99% by HPLC

Calphostin C

Code No.: BIA-C1014 Pack Sizes: 0.1 mg, 0.5 mg

Calphostin C (PKF115-584) is a perylenequinione isolated from the fungus, Cladosporium cladosporioides. Calphostin C is a potent and specific inhibitor of protein kinase C (PKC), with inhibition being light dependent. Calphostin C inhibits cell proliferation and induces apoptosis in vitro. Calphostin C is an antagonist of Tcf4/b-catenin signalling, inhibiting the expression of survivin and inducing apoptosis in several tumor cell lines.

CAS Number: 121263-19-2 Molecular Formula: $C_{44}H_{38}O_{14}$ Molecular Weight: 790.8

Source: Cladosporium cladosporioides

Purity: >95% by HPLC

Candicidin complex

Code No.: BIA-C1564 Pack Sizes: 1 mg, 5 mg

Candicidin is a macrocyclic heptaene antifungal complex produced by Streptomyces griseus and isolated by Lechevalier and colleagues in 1953. The candicidin complex comprises analogues A, B, C and D, with candicidin D as the major component. Candicidin is active against fungi, in particular Candida albicans, and is used clinically to treat vaginal candidiasis. Like all polyene antifungal metabolites, candicidin acts by binding to ergosterol and disrupting the fungal membrane.

CAS Number: 1403-17-4

 $\label{eq:condition} \mbox{Molecular Formula:} \quad C_{59} H_{84} N_2 O_{18} \mbox{ (for Candicidin D)}$

Molecular Weight: 1109.3

Source: Streptomyces griseus
Purity: >95% by HPLC



Capreomycin

Code No.: BIA-C1454 Pack Sizes: 5 mg, 25 mg

Capreomycin is a complex of cyclic pentopeptides isolated from Streptomyces capreolus, first reported in 1962. The complex has two major components, IA and IB, with an exocyclic lysine residue and two minor delysinyl components, IIA and IIB. Capreomycin is a potent antibiotic with activity against mycobateria, Gram positive and Gram negative organisms. Capreomycin acts by binding to the 23S ribosomal subunit, disrupting protein synthesis.

CAS Number: 11003-38-6 Molecular Formula: $C_{25}H_{44}N_{14}O_7$ (for IB)

Molecular Weight: 652.7

Source: Streptomyces sp. Purity: >99% by HPLC

Capreomycin sulfate

Code No.: BIA-C1455 Pack Sizes: 5 mg, 25 mg

Capreomycin sulfate is a salt of a complex of cyclic pentopeptides isolated from Streptomyces capreolus, first reported in 1962. The sulfate salt is the most commonly accessible formulation of capreomycin and is used for pharmaceutical applications. The complex has two major components, IA and IB, with an exocyclic lysine residue and two minor delysinyl components, IIA and IIB. Capreomycin is a potent antibiotic with activity against mycobateria, Gram positive and Gram negative organisms. Capreomycin acts by binding to the 23S ribosomal subunit, disrupting protein synthesis.

CAS Number: 1405-37-4

Molecular Formula: $C_{25}H_{48}N_{14}O_{13}S_2$ (for IB)

Molecular Weight: 816.9

Source: Streptomyces sp. Purity: >99% by HPLC

Caspofungin acetate

Code No.: BIA-C1239 Pack Sizes: 1 mg, 5 mg

Caspofungin is a semi-synthetic analogue of pneumocandin B0 with improved water solubility, a significant limitation in the development of the echinocandin class as pharmaceuticals. Caspofungin acts by inhibiting the synthesis of $\beta\text{-}(1,3)\text{-}D\text{-}glucan,$ an essential component of the cell wall of susceptible fungi.

CAS Number: 179463-17-3 Molecular Formula: $C_{52}H_{88}N_{10}O_{15} \bullet 2C_{2}H_{4}O_{2}$

Molecular Weight: 1213.4
Source: Semi-synthetic
Purity: >99% by HPLC

Cellocidin

Code No.: BIA-C1449 Pack Sizes: 5 mg, 25 mg

$$C \equiv C \longrightarrow C$$

Cellocidin is a small neutral alkyne produced by a number of Streptomyces species, first discovered by Suzuki and colleagues in 1958. Cellocidin has a broad antibacterial, antifungal and antitumor profile due to its ability to react with endogenous thiols like cysteine and glutathione. Cellocidin occurs as a weak active in many bioassays using actinomycete crude extracts and is thus a useful standard for chemical and bioassay dereplication.

CAS Number: 543-21-5
Molecular Formula: C₄H₄N₂O₂
Molecular Weight: 112.1
Source: Synthetic
Purity: >98% by HPLC

Cercosporamide

Code No.: BIA-C1015 Pack Sizes: 0.5 mg, 2.5 mg

Cercosporamide was originally identified as a host-selective phytotoxin and broad spectrum antifungal agent isolated from Cercosporidium henningsii. More recently, cercosporamide was shown to inhibit a cell wall integrity pathway mediated through a serine/threonine protein kinase, Pkc1, that is central to cell wall biosynthesis. It is both a potent (IC50<50nM) and selective inhibitor of Pkc1 kinase.

 $\begin{array}{lll} \text{CAS Number:} & 131436\text{-}22\text{-}1 \\ \text{Molecular Formula:} & C_{16}\text{H}_{13}\text{NO}_7 \\ \text{Molecular Weight:} & 331.3 \\ \end{array}$

Source: *Cercosporidium* sp. Purity: >95% by HPLC



Cercosporin

Code No.: BIA-C1521 Pack Sizes: 1 mg, 5 mg

OH O OCH₃ OH OCH₃

Cercosporin (CGP049090) is a perylenequinone reported in 1957 as the causative agent of soy bean purple speck disease due to the fungal pathogen, Cercsopsorium kikuchii, which is widely found in species of Cercosporium. Cercosporin phytotoxicity is light-activated and this process contributes to a wider biological profile as a photodynamic antiviral and antitumor active. Cercosporin is an antagonist of Tcf4/b-catenin signalling, inhibiting the expression of survivin and inducing apoptosis in several tumor cell lines.

CAS Number: 35082-49-6
Molecular Formula: $C_{29}H_{26}O_{10}$ Molecular Weight: 534.5
Source: Cercospora sp.

Purity: >98% by HPLC

Cerulenin

Code No.: BIA-C1218 Pack Sizes: 5 mg, 25 mg

O NH₂

Cerulenin is an epoxy fatty acid amide isolated from the fungus Cephalosporium caerulens and identified as an antifungal in the 1960s. Over the past 40 years, cerulenin has found broad application in lipid biochemistry as an inhibitor fatty acid and sterol biosynthesis. Cerulenin binds to β -keto-acyl-ACP synthase, blocking the interaction of malonyl CoA. Cerulenin also an inhibits bacterial fatty acid synthesis, acting on the FabH, FabB and FabF condensation enzymes. Cerulenin stimulates fatty acid oxidation and inhibits HMG-CoA synthetase activity.

 $\begin{array}{lll} \text{CAS Number:} & 17397\text{-}89\text{-}6 \\ \text{Molecular Formula:} & C_{12}H_{17}NO_3 \\ \text{Molecular Weight:} & 223.3 \\ \end{array}$

Source: Cephalosporium caerulens

Purity: >98% by HPLC

Chaetocin

Code No.: BIA-C1146 Pack Sizes: 1 mg, 5 mg

Chaetocin is an epithiodioxopiperazine antibiotic that has recently shown promise as a selective antitumor agent. Chaetocin is an inhibitor of lysine-specific methyltransferase SU(VAR)3-9 both in vitro and in vivo. Chaetocin is dramatically accumulated in cancer cells via a process inhibited by glutathione. Inside the cell, its activity is mediated by the imposition of oxidative stress.

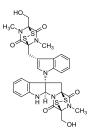
CAS Number: 28097-03-2 Molecular Formula: $C_{30}H_{28}N_6O_6S_4$ Molecular Weight: 696.9

Source: Chaetomium sp. Purity: >99% by HPLC

Chaetomin



Code No.: BIA-C1719 Pack Sizes: 0.5 mg, 2.5 mg



Chaetomin is an epidithiodioxopiperazine metabolite first isolated from Chaetomium cochliodes by Waksman and Bugie in 1944 as an antibiotic. Its structure was resolved in the 1970s comprising a non-symmetric bis-epidithiodioxopiperazine with both hemispheres having a core N,N'-dimethyldiketopiperazine linked by a bisulfide bridge. Chaetomin is an important chemo-taxonomic standard for characterising the genus Chaetomium. Chaetomin is a potent antitumor agent, inhibiting hypoxia-inducible transcription. Chaetomin is used extensively as a molecular reagent and is the subject of over 150 citations in Scifinder.

CAS Number: 1403-36-7 Molecular Formula: $C_{31}H_{30}N_6O_6S_4$ Molecular Weight: 710.9 Source: Chaetomium sp. Purity: >95% by HPLC

Chaetominine



Code No.: BIA-C1718 Pack Sizes: 0.5 mg, 2.5 mg



Chaetominine is an unusual heterocyclic fungal metabolite isolated as a potent anti-tumor agent from an unspeciated endophytic strain of Chaetomium by researchers at Nanjing University, China in 2006. Interest in the structure of chaetominine has given rise to five independent total syntheses. Chaetominine's origin as a plant endophyte has highlighted its role as an allelochemical providing direct advantage to its host by suppressing germination and growth of competing plant species. Lack of availability has hampered further research of its pharmacology.

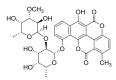
 $\begin{array}{lll} \text{CAS Number:} & 918659\text{-}56\text{-}0 \\ \text{Molecular Formula:} & C_{22}H_{18}N_4O_4 \\ \text{Molecular Weight:} & 402.4 \end{array}$

Source: Aspergillus sp.
Purity: >95% by HPLC



Chartreusin

Code No.: BIA-C1124 Pack Sizes: 5 mg, 25 mg



Chartreusin is an antitumor antibiotic that binds to GC-rich tracts in DNA, with a clear preference for B-DNA over Z-DNA. It inhibits RNA synthesis and causes single-strand scission of DNA via the formation of free radicals. Chartreusin is also a potent inhibitor of topoisomerase II.

CAS Number: 6377-18-0 Molecular Formula: $C_{32}H_{32}O_{14}$ Molecular Weight: 640.6

Source: Streptomyces sp. Purity: >99% by HPLC

Chevalone B



Code No.: BIA-C1638 Pack Sizes: 0.25 mg, 1 mg

Chevalone B is a meroterpenoid metabolite isolated from the fungus, Eurotium chevalieri, by Thai researchers in 2011. The pentacyclic ring system of chevalone B is formed by closure of ring D via coupling of the 4-hydroxy pyrone tautomer to the exoalkene. This gives chevalone B a distinctly different UV spectrum from chevalone C which couples through the 2-hydroxypyrone isomer. Chevalone B has weak activity against some tumor cell lines

 $\begin{array}{lll} \text{CAS Number:} & 1318025\text{-}75\text{-}0 \\ \text{Molecular Formula:} & \text{C}_{28}\text{H}_{40}\text{O}_{5} \\ \text{Molecular Weight:} & 456.6 \\ \end{array}$

Source: *Neosartorya* sp. Purity: >95% by HPLC

Chevalone C



Code No.: BIA-C1637 Pack Sizes: 1 mg, 5 mg

Chevalone C is a meroterpenoid metabolite isolated from the fungus, Eurotium chevalieri, by Thai researchers in 2011. The pentacyclic ring system of chevalone C is formed from closure of ring D by coupling the 2-hydroxy pyrone tautomer to the exoalkene. This gives chevalone C a distinctly different UV spectrum from chevalones A and B which couple through the 4-hydroxypyrone tautomer. The ring closure to form chevalone C can also be achieved by acid catalysis of aszonapyrone A. Chevalone C has weak activity against mycobacteria and some tumor cell lines.

 $\begin{array}{lll} \text{CAS Number:} & 1318025\text{-}77\text{-}2 \\ \text{Molecular Formula:} & C_{28}\text{H}_{40}\text{O}_5 \\ \text{Molecular Weight:} & 456.6 \\ \end{array}$

Source: *Neosartorya* sp. Purity: >95% by HPLC

Chloramphenicol

Code No.: BIA-C1474 Pack Sizes: 25 mg, 100 mg

Chloramphenicol is unusual nitroaromatic metabolite produced by Streptomyces venezuelae, first published in 1947. Chloramphenicol is a broad spectrum antibiotic with good activity against Gram negative and anaerobic bacteria. Although restricted to ocular use, antibiotic resistance to other classes has refocused attention on this class. Chloramphenicol acts by binding to the 23S sub-unit of the 50S ribosome, inhibiting protein synthesis. Chloramphenicol has been extensively studied with over 35,000 literature citations.

CAS Number: 56-75-7 Molecular Formula: $C_{11}H_{12}Cl_2N_2O_5$ Molecular Weight: 323.1

Source: Streptomyces sp. Purity: >99% by HPLC

Chloramphenicol acetate

Code No.: BIA-C1476 Pack Sizes: 5 mg, 25 mg

Chloramphenicol acetate is a naturally-occurring co-metabolite of chloramphenicol in Streptomyces venezuelae albeit with significantly lower potency. Chloramphenicol acetate is the major product of chloramphenicol acetyltransferase, the major resistance mechanism to chloramphenicol.

CAS Number: 10318-16-8 Molecular Formula: $C_{13}H_{14}Cl_2N_2O_6$ Molecular Weight: 365.2

Source: Streptomyces sp. Purity: >99% by HPLC

Chloramphenicol base

Code No.: BIA-C1475 Pack Sizes: 25 mg, 100 mg

Chloramphenicol base is the parent 4-nitrophenylpropylamine formed by the hydrolysis of the dichloroacetamide of chloramphenicol and is a degradation product commonly encountered with commercial production of chloramphenicol. Chloramphenicol base has no antibiotic activity but has played an integral role in the synthesis and SAR of new generation antibiotics, notably thiamphenicol and experimental analogues, bromamphenicol and methamphenicol.

CAS Number: 716-61-0 Molecular Formula: $C_9H_{12}N_2O_4$ Molecular Weight: 212.2 Source: Synthetic Purity: >99% by HPLC



Chloramphenicol palmitate

Code No.: BIA-C1477 Pack Sizes: 5 mg, 25 mg

Chloramphenicol palmitate is prepared by acylation of chloramphenicol with palmitic acid. Although chloramphenicol palmitate is a more hydrophobic drug which should enhance bioavailability, the primary advantage of the ester is to mask the taste of chloramphenicol in oral formulations. Chloramphenicol palmitate is significantly less active than chloramphenicol but acts as a prodrug, being readily hydrolysed by acid and esterase in the qut to release chloramphenicol.

CAS Number: 530-43-8 Molecular Formula: $C_{27}H_{42}N_2Cl_2O_6$ Molecular Weight: 561.5 Source: Semi-synthetic

Source: Semi-synthetic Purity: >99% by HPLC

Chloramphenicol succinate

Code No.: BIA-C1478 Pack Sizes: 5 mg, 25 mg

Chloramphenicol succinate is prepared by acylation of chloramphenicol with succinic anhydride to provide a water soluble pro-drug. Chloramphenicol succinate represents an alternative pro-drug strategy for chloramphenicol that has found a niche in surface antibiotic treatment in surgery. Chloramphenicol succinate is significantly less active than chloramphenicol but acts as a prodrug, forming chloramphenicol in the presence of succinate dehydrogenase.

CAS Number: 3544-94-3 Molecular Formula: $C_{15}H_{16}Cl_2N_2O_8$ Molecular Weight: 423.2

Source: Semi-synthetic Purity: >99% by HPLC

Chloramphenicol succinate sodium

Code No.: BIA-C1479 Pack Sizes: 25 mg, 100 mg

Chloramphenicol succinate sodium is the salt prepared from chloramphenicol succinate using the free carboxylic acid of the succinate which ionises and readily forms in weak sodium hydroxide solutions. The sodium salt is the preferred formulation for pharmaceutical applications, providing a more readily soluble product. Chloramphenicol succinate is significantly less active than chloramphenicol but acts as a prodrug, forming chloramphenicol in the presence of succinate dehydrogenase.

CAS Number: 982-57-0
Molecular Formula: C₁₅H₁₅Cl₂N₂O₈Na

Molecular Weight: 445.2

Source: Semi-synthetic Purity: >99% by HPLC

Chlorothricin

Code No.: BIA-C1016 Pack Sizes: 1 mg, 5 mg

The tetronic acid, chlorothricin, is an unusual macrocyclic antibiotic from a Streptomyces sp., related to kijanimicin, saccharocarcins, tetrocarcins and versipelostatin. Chlorothricin inhibits cholesterol biosynthesis from mevalonate and inhibits pyruvate carboxylases purified from rat liver, chicken liver and Azotobacter vinelandii.

CAS Number: 34707-92-1 Molecular Formula: $C_{50}H_{63}CIO_{16}$ Molecular Weight: 955.5

Source: Streptomyces sp. Purity: >99% by HPLC

Chlortetracycline

Code No.: BIA-C1335 Pack Sizes: 5 mg, 25 mg

Chlortetracycline was the first reported member of the tetracycline class, isolated from Streptomyces aureofaciens in 1948. Chlortetracyclines heralded the early wave of antibiotic discoveries from microbes and after 50 years are still widely used as pharmaceuticals. Chlortetracycline is a pigment and, like most pigments, is extremely sensitive to environmental and storage conditions. Commercial chlortetracycline may contain significant levels of degradation products.

CAS Number: 57-62-5 Molecular Formula: $C_{22}H_{23}CIN_2O_8$ Molecular Weight: 478.9

Source: Streptomyces sp. Purity: >98% by HPLC

Chlortetracycline hydrochloride

Code No.: BIA-C1506 Pack Sizes: 5 mg, 25 mg

Chlortetracycline hydrochloride is a salt prepared from chlortetracycline taking advantage of the basic dimethylamino group which protonates and readily forms the salt in hydrochloric acid solutions. The hydrochloride is the preferred formulation for pharmaceutical applications. Like all tetracyclines, chlortetracycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal sub-units, blocking protein synthesis.



 $\begin{array}{lll} \text{CAS Number:} & \text{64-72-2} \\ \text{Molecular Formula:} & \text{C}_{22}\text{H}_{24}\text{Cl}_{2}\text{N}_{2}\text{O}_{8} \\ \text{Molecular Weight:} & \text{515.3} \\ \end{array}$

Source: Streptomyces sp. Purity: >99% by HPLC

Chromomycin A2

Code No.: BIA-C1518 Pack Sizes: 1 mg, 5 mg

Chromomycin A2 is a minor, more hydrophobic analogue of the chromomycin complex of the aureolic acid class. Chromomycin A2 was originally isolated from S. aburaviensis and named aburamycin. Chromomycin A2 exhibits a broad biological profile as an antibacterial, antifungal and antitumor agent. Chromomycin A2 has not been extensively studied.

CAS Number: 6992-70-7 Molecular Formula: $C_{59}H_{86}O_{26}$ Molecular Weight: 1211.3

Source: Streptomyces sp. Purity: >98% by HPLC

Chromomycin A3

Code No.: **BIA-C1240** Pack Sizes: **1 mg, 5 mg**

Chromomycin A3 is the major component of the chromomycin complex of the aureolic acid class, isolated from several Streptomyces species, and first reported in 1960. Chromomycin A3 exhibits a broad biological profile as an antibacterial, antifungal and antitumor agent. It binds reversibly to GC-specific DNA ligand in the minor groove which inhibits transcription, DNA gyrase and topoisomerase II activity. The intense UV spectrum and strong fluorescence makes chromomycin a useful stain for DNA.

CAS Number: 7059-24-7 Molecular Formula: $C_{57}H_{82}O_{26}$ Molecular Weight: 1183.3

Source: Streptomyces sp. Purity: >98% by HPLC

Chrysomycin A

Code No.: BIA-C1017 Pack Sizes: 0.5 mg, 2.5 mg

Chrysomycin A is the major analogue in a complex of C-glycoside antitumor actives isolated from Streptomyces. Chrysomycin A, with a vinyl group in the 8-position, is the most potent analogue of the complex, and is thought to act as an inhibitor of the catalytic activity of human topoisomerase II. Chrysomycin A has a potent antibacterial, antifungal, antiviral and antitumor profile. More recent research on related metabolites, the gilvocarcins, suggests that chrysomycins may act as photoactivated cross-linkers of DNA to histones.

CAS Number: 82196-88-1
Molecular Formula: C₂₈H₂₈O₉
Molecular Weight: 508.5

Source: Streptomyces sp. Purity: >99% by HPLC

Chrysomycin B

Code No.: BIA-C1018 Pack Sizes: 0.5 mg, 2.5 mg

antitumor actives isolated from Streptomyces. Chrysomycin B, containing a methyl group in the 8-position, is less active than its vinyl analogue (Chrysomycin A), albeit still a potent antitumor active and an inhibitor of the catalytic activity of human topoisomerase II. More recent research on related metabolites, the gilvocarcins, suggests that chrysomycins may act as photoactivated cross-linkers of DNA to histones.

CAS Number: 83852-56-6 Molecular Formula: C₂₇H₂₈O₉ Molecular Weight: 496.5

Source: Streptomyces sp. Purity: >98% by HPLC

Cinnamamide



Code No.: BIA-C1733 Pack Sizes: 5 mg, 25 mg

Cinnamamide (cinnamide) is an amide from a family of phenylpropanoid derivatives of lignin precursors. It is found in crude extracts of several species of Streptomyces. Cinnamamide was first reported as a monoamine oxidase inhibitor but was subsequently shown to have weak activity in a diverse range of bioassays. Cinnamamide is a useful standard for analytical and bioassay dereplication of crude microbial extracts.

CAS Number: 621-79-4 Molecular Formula: C_9H_9NO Molecular Weight: 147.2

Source: Streptomyces sp. Purity: >95% by HPLC



Cinnamic acid



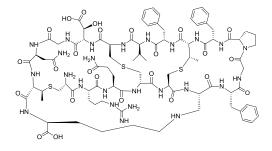
Code No.: BIA-C1725 Pack Sizes: 5 mg, 25 mg

Cinnamic acid is a common plant metabolite, biosynthetically formed by the action of phenylalanine ammonia-lyase (PAL) on phenylalanine. Cinnamic acid is a member of the phenylpropanoid class of lignin biosynthetic precursors. Cinnamic acid is produced by many microorganisms but is also readily produced by fermentation on media containing plant extracts. The biochemical and pharmacological activity of cinnamic acid has > 13,000 entries in SciFinder and is well reviewed by Guzman (2014) and Sharma (2011). Cinnamic acid a useful standard for analytical and bioassay dereplication.

CAS Number: 621-82-9 Molecular Formula: $C_9H_8O_2$ Molecular Weight: 148.2 Source: Synthetic Purity: >95% by HPLC

Cinnamycin

Code No.: BIA-C1432 Pack Sizes: 1 mg, 5 mg



Cinnamycin (lanthiopeptin) is a high molecular weight tricyclic antibiotic produced by several species of Streptoverticillium. Cinnamycin is a potent indirect inhibitor of phospholipase A2, acting by specifically sequestering phosphatidylethanolamine (PE), a major component of the mammalian plasma cell membrane. Cinnamycin induces trans-bilayer phospholipid movement in cell membranes to expose internally bound PE. At high surface concentrations of PE, cinnamycin induces membrane reorganisation including membrane fusion and alteration of gross morphology.

CAS Number: 110655-58-8 Molecular Formula: $C_{89}H_{125}N_{25}O_{25}S_3$ Molecular Weight: 2041.3

Source: Streptomyces sp. Purity: >98% by HPLC

Citreoindole



Code No.: BIA-C1697 Pack Sizes: 0.5 mg, 2.5 mg

Citreoindole is an unusual diketopiperazine metabolite first isolated from a hybrid cell fusion of two strains of Pencillium citreoviride by researchers at Keio University, Japan in 1991. In 2016, Capon and co-workers revised the structure of citreoindole from the 5-benzyl-4-imidazolidyl ring to a 6-phenyl-4(1)-pyrimidone ring. The same year, its stereochemistry was resolved by Gloer and co-workers by extrapolation from the crystal structure of a close analogue, haenamindole. Citreoindole has weak activity against mammalian tumor cell lines but its pharmacology has not been further investigated.

CAS Number: 138655-14-8 Molecular Formula: $C_{29}H_{28}N_4O_4$ Molecular Weight: 496.6

Source: Penicillium citreonigrum

Purity: >95% by HPLC

Citreoviridin

Code No.: BIA-C1241 Pack Sizes: 1 mg, 5 mg

Citreoviridin is the dominant analogue of a family of tetraene mycotoxins with potent neurotoxic effects, produced by several species of Aspergillus and Penicillium. Citreoviridin inhibits mitochondrial ATPase and is a causative agent of cardiac beriberi.

CAS Number: 25425-12-1 Molecular Formula: $C_{23}H_{30}O_6$ Molecular Weight: 402.5

Source: *Penicillium* sp. Purity: >97% by HPLC

Citrinin

Code No.: BIA-C1242 Pack Sizes: 1 mg, 5 mg

Citrinin is a quinonemethine mycotoxin produced by diverse fungi including Aspergillus and Penicillium. Citrinin has been extensively investigated and is a potent nephrotoxin with hepatoxic and teratogenic activity. Citrinin is the causative agent of Balkan nephropathy and yellow rice fever in humans. At the molecular level, citrinin exhibits a range of effects including free radical damage to DNA and disruption of mitochondrial membrane-bound enzymic activities and structural integrity. Specifically, citrinin is an inhibitor of NADH dehydrogenase in the mitochondrial electron transport chain and this action is responsible for recent reports of citrinin's apoptotic activity.

CAS Number: 518-75-2 Molecular Formula: $C_{13}H_{14}O_5$ Molecular Weight: 250.3

Source: *Penicillum citrinum*Purity: >99% by HPLC

Citromycetin

Code No.: BIA-C1189 Pack Sizes: 1 mg, 5 mg



Citromycetin was independently isolated and named from a number of different fungal species during the 1930s to 1950s and subsequently shown to be identical. Citromycetin is active against Gram positive bacteria. NCI studies demonstrated the lack of activity against tumors and AIDS. Citromycetin is an interesting metabolite which has received little attention in modern times.

CAS Number: 478-60-4 Molecular Formula: $C_{14}H_{10}O_{7}$ Molecular Weight: 290.2

Source: Unidentified fungus
Purity: >95% by HPLC

Clarithromycin

Code No.: BIA-C1313 Pack Sizes: 5 mg, 25 mg

Clarithromycin (6-methoxyerythromycin) is a macrolide antibiotic active against a broad range of Gram positive bacteria. Clarithromycin was designed to enhance acid stability and improve oral bioavailability compared with erythromycin which is highly unstable to acidic conditions, undergoing a series of internal ketalisations between the 9-keto moiety and alcohols at C6 and C11. Omura and colleagues found that protection of the labile 6-OH group by methylation provided a simple but elegant solution.

CAS Number: 81103-11-9
Molecular Formula: C₃₈H₆₉NO₁₃
Molecular Weight: 748.0

Source: Semi-synthetic Purity: >98% by HPLC

Clavulanate potassium

Code No.: BIA-C1243 Pack Sizes: 5 mg, 25 mg

Clavulanic acid is a β -lactam antibiotic produced by several species of Streptomyces. The free acid degrades and is isolated and maintained as either the sodium or potassium salt. Clavulanate is a weak antibiotic, but is a potent inhibitor of β -lactamases. In combination with penicillin and cephalosporins, it shows potent synergistic activity. Clavulanic acid is a suicide inhibitor, covalently binding to a serine residue in the active site of the β -lactamase.

CAS Number: 61177-45-5 Molecular Formula: $C_8H_8NO_5K$ Molecular Weight: 237.3

Source: Streptomyces sp. Purity: >98% by HPLC

Clindamycin

Code No.: BIA-C1456 Pack Sizes: 5 mg, 25 mg

Clindamycin is a semi-synthetic analogue of lincomycin, prepared by chloride substitution of the exocyclic sugar hydroxy group. This affords a more hydrophobic compound with improved pharmacodynamics. Like other members of the lincosamide family, clindamycin is a broad spectrum antibiotic with activity against anaerobic bacteria and protozoans. Clindamycin acts by binding to the 23S ribosomal subunit, blocking protein synthesis. Clindamycin has been extensively studied with over 8,000 literature citations.

CAS Number: 18323-44-9 Molecular Formula: $C_{18}H_{33}CIN_2O_5S$ Molecular Weight: 425.0

Source: Semi-synthetic Purity: >99% by HPLC

Clindamycin 2-phosphate

Code No.: BIA-C1503 Pack Sizes: 1 mg, 5 mg

Clindamycin 2-phosphate is a salt of clindamycin, a semi-synthetic lincosamide. The salt is prepared by selective phosphorylation of the 2-hydroxy moiety of the sugar of clindamycin. The introduction of the phosphate affords improved solubility for injectable formulations. Like other members of the lincosamide family, clindamycin 2-phosphate is a broad spectrum antibiotic with activity against anaerobic bacteria and protozoans. Clindamycin acts by binding to the 23S ribosomal subunit, blocking protein synthesis.

CAS Number: 24729-96-2 Molecular Formula: $C_{18}H_{34}CIN_2O_8PS$

Molecular Weight: 505.0

Source: Semi-synthetic Purity: >99% by HPLC

Clindamycin hydrochloride

Code No.: BIA-C1502 Pack Sizes: 5 mg, 25 mg

Clindamycin hydrochloride is a salt of clindamycin, a semi-synthetic lincosamide. The hydrochloride salt forms at the basic Nethylproline moiety and is the preferred pharmaceutical formulation. Like other members of the lincosamide family, clindamycin is a broad spectrum antibiotic with activity against anaerobic bacteria and protozoans. Clindamycin hydrochloride acts by binding to the 23S ribosomal subunit, blocking protein synthesis. Clindamycin hydrochloride has been extensively studied with over 8,000 literature citations.

CAS Number: 21462-39-5 Molecular Formula: $C_{18}H_{34}Cl_2N_2O_5S$

Molecular Weight: 461.4
Source: Semi-synthetic
Purity: >98% by HPLC



Cochlioquinone A

Code No.: BIA-C1019 Pack Sizes: 0.5 mg, 2.5 mg

Cochlioquinone A is the major component of a bioactive pigment isolated from Bipolaris leersia. Cochlioquinone A has recently been shown to be an antagonist of the human chemokine receptor, CCR5, in HIV-1. Cochlioquinone A is anti-angiogenic and exhibits inhibitory activity against diacylglycerol acyltransferase and NADH-ubiquinone reductase.

CAS Number: 32450-25-2 Molecular Formula: $C_{30}H_{44}O_{8}$ Molecular Weight: 532.7

Source: Bipolaris leersia
Purity: >99% by HPLC

Cochlioquinone B

Code No.: BIA-C1020 Pack Sizes: 0.5 mg, 2.5 mg

Cochlioquinone B, the minor component of a bioactive pigment isolated from Bipolaris leersia, is an NADH-ubiquinone reductase inhibitor and phytotoxic agent inhibiting root growth. It is closely related to Cochlioquinone A which inhibits diacylglycerol acyltransferase and exhibits anti-angiogenic and nematocidal activity. Cochlioquinones have recently been shown to be antagonists of the human chemokine receptor, CCR5, in HIV-1.

CAS Number: 32450-26-3 Molecular Formula: $C_{28}H_{40}O_6$ Molecular Weight: 472.6

Source: Bipolaris leersia
Purity: >99% by HPLC

Collismycin

Code No.: BIA-C1624 Pack Sizes: 1 mg, 5 mg

Collismycin is a rare and unusual antibiotic belonging to the caerulomycin class, containing a core 2,2'-bispyridyl with an oxime substituent, produced by a strain of Streptomyces and discovered by researchers from Kirin, Japan in 1994. Collismycin was discovered as a potent inhibitor of glucocorticoid receptor binding. Collismycin has weak to moderate activity against bacteria, fungi and tumor cell lines. More recently, collismycin has been found to be a potent and selective neuroprotective agent against oxidative stress. Other recent publications have focused on the biosynthesis of collismycin as a route to the production of related analogues.

CAS Number: 158792-24-6
Molecular Formula: C₁₃H₁₃N₃O₂S
Molecular Weight: 275.3

Source: Streptomyces sp. Purity: >95% by HPLC

Concanamycin A

Code No.: BIA-C1021 Pack Sizes: 0.25 mg, 1 mg

Concanamycin A is the major analogue of the concanamycin complex produced by Streptomyces sp. It has been shown to act as a potent and specific vacuolar-ATPase inhibitor. Concanamycin A inhibits the acidification of organelles and blocks cell surface expression of viral envelope glycoproteins without affecting their synthesis. It also interferes with intracellular protein trafficking and inhibits perforin- and Fas-based lytic pathways in cell-mediated cytotoxicity. Concanamycins are structurally related to the bafilomycins.

CAS Number: 80890-47-7 Molecular Formula: $C_{46}H_{75}NO_{14}$ Molecular Weight: 866.1

Source: Streptomyces sp. Purity: >99% by HPLC

Concanamycin B

Code No.: BIA-C1366 Pack Sizes: 0.25 mg, 1 mg

Concanamycin B is a macrocyclic lactone originally isolated from Streptomyces diastatochromogenes in 1982 as a potent inhibitor of the proliferation of mouse splenic lymphocytes stimulated by concanavalin A. Like other concanamycins and bafilomycins, concanamycin B inhibits vacuolar H(+)-ATPase. Concanamycin B inhibits the expression of newly-synthesized MHC class II molecules and suppresses bone resorption in vitro.

CAS Number: 81552-33-2 Molecular Formula: $C_{45}H_{73}NO_{14}$ Molecular Weight: 852.1

Source: Streptomyces sp. Purity: >95% by HPLC

Conglobatin

Code No.: BIA-C1022 Pack Sizes: 0.5 mg, 2.5 mg

Isolated from Streptomyces conglobatus, conglobatin has an unusual dimeric macrolide dilactone structure with pendant oxazole groups. Conglobatin exhibits an IC50 of 0.63 μ g/ml in a



NFAT-dependant transcription assay. No toxicity was observed at doses up to 1000 mg/kg when administered to mice either orally or interperitoneally.

CAS Number: 72263-05-9 Molecular Formula: $C_{28}H_{38}N_2O_6$ Molecular Weight: 498.6

Source: Streptomyces conglobatus

Purity: >98% by HPLC

Cordycepin



Code No.: BIA-C1688 Pack Sizes: 1 mg, 5 mg

Cordycepin is a nucleoside metabolite first isolated by Cunningham in 1951 as an antibacterial from Cordyceps militaris, an ascomycete that parasitises soil dwelling caterpillars. Cordycepin was subsequently proven to be a simple analogue of adenosine, 3'-deoxyadenosine. Cordycepin is a potent antitumor active. Its production, chemistry, biosynthesis and bioactivity were reviewed by Suhadolink in 1970. More recently, natural medicinal preparations of C. militaris have found wide appeal and sparked re-investigation into cordycepin's effects on abnormal gut dwelling bacteria.

CAS Number: 73-03-0
Molecular Formula: C₁₀H₁₃N₅O₃
Molecular Weight: 251.2

Source: *Cordyceps* sp. Purity: >95% by HPLC

Corynecin I

Code No.: BIA-C1480 Pack Sizes: 1 mg, 5 mg

Corynecin I is a member of a naturally-occurring complex of chloramphenicol-like acyl nitrophenylpropylamines isolated from Corynebacterium hydrocarboclastus in 1972. Corynecin I is active against Gram positive and Gram negative bacteria. Although less potent than chloramphenicol, corynecin I shows a similar species selectivity.

 $\begin{array}{lll} \text{CAS Number:} & 4423\text{-}58\text{-}9 \\ \text{Molecular Formula:} & C_{11}H_{14}N_2O_5 \\ \text{Molecular Weight:} & 254.2 \\ \end{array}$

Source: *Corynebacterium* sp. Purity: >99% by HPLC

Corynecin II

Code No.: BIA-C1481 Pack Sizes: 1 mg, 5 mg

$$O_2N \xrightarrow{OH} H$$

Corynecin II is a member of a naturally-occurring complex of chloramphenicol-like acyl nitrophenylpropylamines isolated from Corynebacterium hydrocarboclastus in 1972. Corynecin II is active against Gram positive and Gram negative bacteria. Although less

potent than chloramphenicol, corynecin II shows a similar species selectivity.

CAS Number: 35098-52-3 Molecular Formula: $C_{12}H_{16}N_2O_5$ Molecular Weight: 268.3

Source: Corynebacterium sp. Purity: >99% by HPLC

Corynecin III

Code No.: BIA-C1482 Pack Sizes: 1 mg, 5 mg

Corynecin III (methamphenicol) is a member of a naturallyoccurring complex of chloramphenicol-like acyl nitrophenylpropylamines isolated from Corynebacterium hydrocarboclastus in 1972. Corynecin III is active against Gram positive and Gram negative bacteria. Although less potent than chloramphenicol, corynecin III shows a similar species selectivity. Corynecin III was used as a bioisostere of chloroamphenicol to examine the binding relationship of chloramphenicols to DraE virulence factor.

CAS Number: 18048-95-8 Molecular Formula: $C_{13}H_{18}N_2O_5$ Molecular Weight: 282.3

Source: *Corynebacterium* sp. Purity: >99% by HPLC

Corynecin IV

Code No.: BIA-C1483 Pack Sizes: 1 mg, 5 mg

Corynecin IV is a member of a naturally-occurring complex of chloramphenicol-like acyl nitrophenylpropylamines isolated from Corynebacterium hydrocarboclastus in 1972. Corynecin IV is active against Gram positive and Gram negative bacteria. Although less potent than chloramphenicol, corynecin IV shows a similar species selectivity.

CAS Number: 40958-11-0 Molecular Formula: $C_{13}H_{16}N_2O_6$ Molecular Weight: 296.3

Source: *Corynebacterium* sp. Purity: >99% by HPLC

Corynecin V

Code No.: BIA-C1484 Pack Sizes: 1 mg, 5 mg

Corynecin V is a member of a naturally-occurring complex of chloramphenicol-like acyl nitrophenylpropylamines isolated from Corynebacterium hydrocarboclastus in 1972. Corynecin V is active against Gram positive and Gram negative bacteria. Although less potent than chloramphenicol, corynecin V shows a similar species selectivity.



CAS Number: 40958-12-1 Molecular Formula: $C_{14}H_{18}N_2O_6$ Molecular Weight: 310.3

Source: *Corynebacterium* sp. Purity: >99% by HPLC

p-Coumaric acid

NEW

Code No.: BIA-C1726 Pack Sizes: 5 mg, 25 mg

но

p-Coumaric acid is a common plant metabolite, biosynthetically formed by the action of tyrosine ammonia-lyase (TAL) on phenylalanine. p-Coumaric acid is a member of the phenylpropanoid class of lignin biosynthetic precursors. p-Coumaric acid is readily produced by fermentation on media containing plant extracts. The biochemical and pharmacological activity of p-coumaric acid has > 10,000 SciFinder entries and the area is well reviewed by Guzman (2014) and Sharma (2011). p-Coumaric acid a useful standard for analytical and bioassay dereplication.

CAS Number: 7400-08-0 Molecular Formula: $C_9H_8O_3$ Molecular Weight: 164.2 Source: Synthetic Purity: >95% by HPLC

Curvularin

Code No.: BIA-C1125 Pack Sizes: 1 mg, 5 mg

HO

Curvularin is a 12-membered macrocyclic lactone incorporating a resorcinyl moiety, produced by a number of fungal species including Curvularia, Penicillium and Alternaria. Curvularin exhibits a distinctly different biological profile to the structurally similar resorcylic acid lactones such as the zearalenones, radicicol and LL Z1640-2. Curvularin inhibits cell division by disrupting mitotic spindle formation and is known to be phytotoxic. More recent investigations have shown that curvularin is a highly selective transcription-based inhibitor of iNOS-dependent NO production, acting on the Janus tyrosine kinase-STAT pathway. This action offers an approach to the development of drugs inhibiting iNOS overproduction associated with NO pathophysiology.

CAS Number: 10140-70-2 Molecular Formula: $C_{16}H_{20}O_5$ Molecular Weight: 292.3 Source: Penicillium sp. Purity: >99% by HPLC

Cyclo(D-Ala-L-Pro)

NEW

Code No.: BIA-C1713 Pack Sizes: 5 mg, 25 mg

Cyclo(D-Ala-L-Pro) is an unusual D-amino acid-containing diketopiperazine metabolite reported as a fermentation product

from Penicillium terrestre, an endolichenous Colpoma sp. and a marine sponge extract. In all cases, cyclo(D-Ala-L-Pro) was found co-produced with L-amino acid-containing diketopiperazines. No biological activity has been reported, although cyclo(D-Ala-L-Pro) appears in several recent patents covering a diverse range of diketopiperazines with broad therapeutic claims.

CAS Number: 36238-64-9 Molecular Formula: $C_8H_{12}N_2O_2$ Molecular Weight: 168.2 Source: Penicillium sp. Purity: >95% by HPLC

cyclo(Δ-Ala-L-Val)

Code No.: BIA-C1361 Pack Sizes: 1 mg, 5 mg



Cyclo(Δ -Ala-L-Val) is a diketopiperazine formed by the fusion of Δ -alanine and valine, reported as a secondary metabolite of fungi and bacteria. In Pseudomonas aeruginosa, cyclo(Δ -Ala-L-Val) is capable of activating N-acylhomoserine lactones (AHLs). Cyclo(Δ -Ala-L-Val) is also capable of activating or antagonizing other LuxR-based quorum-sensing systems. While the mode of action of cyclo(Δ -Ala-L-Val) is not known, its activity suggests the existence of cross talk among bacterial signalling systems.

CAS Number: 25516-00-1 Molecular Formula: $C_8H_{12}N_2O_2$ Molecular Weight: 168.1 Source: Synthetic Purity: >98% by HPLC

Cyclo(L-Leu-L-Pro)



Code No.: BIA-C1710 Pack Sizes: 5 mg, 25 mg

Cyclo(L-Phe-L-Pro) (maculosin 6) is an analogue of a family of diketopiperazine metabolites isolated from a strain of Alternaria alternata as a host-specific phytotoxin for spotted knapweed. Cyclo(L-Phe-L-Pro) occurs in many species of bacteria, actinomycetes and fungi. It was also isolated from a marine tunicate-derived Streptomyces strain in 2011. Cyclo(L-Leu-L-Pro) displays herbicidal and antibiotic activity. Cyclo(L-Leu-L-Pro) is an important chemical and bioassay standard for dereplication of crude microbial extracts and is a useful chemo-taxonomic marker for bacteria, actinomycetes and fungi.

CAS Number: 2873-36-1 Molecular Formula: $C_{11}H_{18}N_2O_2$ Molecular Weight: 210.3 Source: Alternaria sp. Purity: >95% by HPLC

Cyclo(L-Leu-L-Trp)



Code No.: BIA-C1711 Pack Sizes: 5 mg, 25 mg

Cyclo(L-Leu-L-Trp) is a diketopiperazine metabolite first isolated from Penicillium aurantiovirens in 1989. Since then, cyclo(L-Leu-L-Trp) has been reported from other fungi and bacteria and is likely to be broadly distributed across microbes and plants. Cyclo(L-Leu-L-Trp) has a bitter taste and is used as a standard in flavor and taste research. Like other diketopiperazines, cyclo(L-Leu-L-Trp) appears in several recent patents covering a diverse range of diketopiperazines with broad therapeutic claims.

CAS Number: 15136-34-2 Molecular Formula: $C_{17}H_{21}N_3O_2$ Molecular Weight: 299.4 Source: Penicillim sp. Purity: >95% by HPLC

Cyclo(L-Phe-L-Phe)



Code No.: BIA-C1716 Pack Sizes: 5 mg, 25 mg

Cyclo(L-Phe-L-Phe) is a diketopiperazine metabolite first reported by Birkinshaw and Mohammed in 1962 as a metabolite of Penicillium nigricans. Cyclo(L-Phe-L-Phe) was subsequently reported as a metabolite in other fungi and actinomycetes and is a useful standard for chemical and bioassay dereplication. Like other diketopiperazines, cyclo(L-Phe-L-Phe) appears in several recent patents covering a diverse range of diketopiperazines with broad therapeutic claims.

CAS Number: 2862-51-3 Molecular Formula: $C_{18}H_{18}N_2O_2$ Molecular Weight: 294.4 Source: Penicillium

Source: *Penicillium* sp. Purity: >95% by HPLC

cyclo(L-Phe-L-Pro)

Code No.: BIA-C1358 Pack Sizes: 5 mg, 25 mg

Cyclo(L-Phe-L-Pro) is a diketopiperazine formed by the fusion of phenylalanine and proline, reported as a secondary metabolite of fungi and bacteria. In Pseudomonas aeruginosa, cyclo(L-Phe-L-Pro) is capable of activating N-acylhomoserine lactones (AHLs). Cyclo(L-Phe-L-Pro) is also capable of activating or antagonizing other LuxR-based quorum-sensing systems. While the mode of action of cyclo(L-Phe-L-Pro) is not known, its activity suggests the existence of cross talk among bacterial signalling systems.

CAS Number: 3705-26-8 Molecular Formula: $C_{14}H_{16}N_2O_2$ Molecular Weight: 244.3 Source: Alternaria sp. Purity: >98% by HPLC

Cyclo(L-Phe-L-Val)



Code No.: BIA-C1709 Pack Sizes: 5 mg, 25 mg



Cyclo(L-Phe-L-Val) is a diketopiperazine metabolite first isolated from a marine bacteria, Pseudoalteromonas sp. in 2011. Cyclo(L-Phe-L-Val) is also produced as a secondary metabolite of Streptomyces rutgerensis and Bacillus subtilis. Limited bioassay data suggests cyclo(L-Phe-L-Val) acts as a quorum sensing regulator but does not itself exhibit antimicrobial activity. Exogenously added cyclo(L-Phe-L-Val) may induce Pseudoalteromonas sp. to produce antibacterial products under low cell density conditions. It appears to act by stimulating the bacteria to induce metabolite production.

CAS Number: 35590-86-4 Molecular Formula: $C_{14}H_{18}N_2O_2$ Molecular Weight: 246.3

Source: Streptomyces sp. Purity: >95% by HPLC

cyclo(L-Pro-L-Tyr)

Code No.: BIA-C1359 Pack Sizes: 5 mg, 25 mg

Cyclo(L-Pro-L-Tyr) (maculosin) is a diketopiperazine formed by the fusion of tyrosine and proline, reported as a secondary metabolite of fungi and bacteria. In Pseudomonas aeruginosa, cyclo(L-Pro-L-Tyr) is capable of activating N-acylhomoserine lactones (AHLs). Cyclo(L-Pro-L-Tyr) is also capable of activating or antagonizing other LuxR-based quorum-sensing systems. While the mode of action of cyclo(L-Pro-L-Tyr) is not known, its activity suggests the existence of cross talk among bacterial signalling systems. Cyclo(L-Pro-L-Tyr) was identified as a host-specific toxin produced by Alternaria alternata on spotted knapweed.

CAS Number: 4549-02-4 Molecular Formula: $C_{14}H_{16}N_2O_3$ Molecular Weight: 260.3 Source: Synthetic Purity: >98% by HPLC

cyclo(L-Pro-L-Val)

Code No.: BIA-C1360 Pack Sizes: 5 mg, 25 mg

Cyclo(L-Pro-L-Val) is a diketopiperazine formed by the fusion of valine and proline, reported as a secondary metabolite of fungi and bacteria. In Pseudomonas aeruginosa, cyclo(L-Pro-L-Val) is capable of activating N-acylhomoserine lactones (AHLs). Cyclo(L-Pro-L-Val) is also capable of activating or antagonizing other LuxR-based quorum-sensing systems. While the mode of action of the cyclo(L-Pro-L-Val) is not known, its activity suggests the existence of cross talk among bacterial signalling systems.

CAS Number: 2854-40-2 Molecular Formula: $C_{10}H_{16}N_2O_2$ Molecular Weight: 196.3 Source: Synthetic Purity: >98% by HPLC

Cyclo(L-Trp-L-Trp)



Code No.: BIA-C1721 Pack Sizes: 5 mg, 25 mg



Cyclo(L-Trp-L-Trp) is a diketopiperazine metabolite isolated from an uncharacterised actinomycete by Korean researchers in 2010 as a broad spectrum antibiotic. Cyclo(L-Trp-L-Trp) is an isomer of the fungal metabolite fellutanine A, which was reported as inactive in antibacterial assays. Cyclo(L-Trp-L-Trp) is highly effective against multidrug-resistant Acinetobacter baumannii, other Gram positive species and the fungi, Saccharomyces cerevisiae, Aspergillus niger and Candida albicans. Cyclo(L-Trp-L-Trp) appears in several recent patents covering a diverse range of diketopiperazines with broad therapeutic claims.

CAS Number: 20829-55-4 Molecular Formula: $C_{22}H_{20}N_4O_2$ Molecular Weight: 372.4 Source: Penicillium sp. Purity: >95% by HPLC

Cyclo(L-Tyr-L-Val)



Code No.: BIA-C1708 Pack Sizes: 5 mg, 25 mg

HO

Cyclo(L-Tyr-L-Val) is a diketopiperazine metabolite isolated from the marine actinomycete, Nocardiopsis gilva in 2013. Cyclo(L-Tyr-L-Val) was reported as inactive as an antioxidant, antitumor or antifungal agent. No other reports of its biological activity have been published, however like other diketopiperazines, cyclo(L-Tyr-L-Val) appears in several recent patents together with a number of other analogues with broad therapeutic claims.

 $\begin{array}{lll} \text{CAS Number:} & 21754\text{-}25\text{-}6 \\ \text{Molecular Formula:} & C_{14}\text{H}_{18}\text{N}_2\text{O}_3 \\ \text{Molecular Weight:} & 262.3 \\ \end{array}$

Source: *Nocardipsis* sp. Purity: >95% by HPLC

Cycloechinulin

Code No.: BIA-C1197 Pack Sizes: 1 mg, 5 mg

Cycloechinulin is an unusual diketopiperazine isolated from Aspergillus ochraceus. Cycloechinulin has not been extensively studied but exhibits insecticidal activity against the lepidopteran crop pest, Helicoverpa zea. Recently, cycloechinulin has found use as a secondary metabolite standard for polyphasic taxonomy in Aspergillus.

CAS Number: 143086-29-7 Molecular Formula: $C_{20}H_{21}N_3O_3$ Molecular Weight: 351.4

Source: Aspergillus ochraceus
Purity: >99% by HPLC

Cycloheximide

Code No.: BIA-C1415 Pack Sizes: 5 mg, 25 mg

Cycloheximide is the most recognised member of the glutarimide microbial metabolites. Cycloheximide was isolated from Streptomyces griseus in the late 1940s as a potent and broad spectrum antifungal. Cycloheximide inhibits protein synthesis by interfering with translocation. Cycloheximide is an established bioprobe and widely-used antifungal reagent in research with over 25,000 literature citations.

CAS Number: 66-81-9 Molecular Formula: C₁₅H₂₃NO₄ Molecular Weight: 281.4

Source: Streptomyces sp. Purity: >99% by HPLC

Cyclopenin

Code No.: BIA-C1126 Pack Sizes: 5 mg, 25 mg

Cyclopenin is one of an unusual family of benzodiazepine metabolites produced by a number of Penicillium species. Often mistakenly referred to as a mycotoxin, cyclopenin shows little toxicity against mammalian cells, bacteria or fungi in vitro. Cyclopenin is an intermediate in the biosynthesis of 3-O-methyl viridicatin, a strong inhibitor of TNFa-induced replication of HIV. Lack of availability has hitherto restricted a more intensive investigation of this interesting metabolite.

CAS Number: 19553-26-5 Molecular Formula: $C_{17}H_{14}N_2O_3$ Molecular Weight: 294.3

Source: *Undescribed fungus*Purity: >99% by HPLC

Cyclopeptine

Code No.: BIA-C1154 Pack Sizes: 1 mg, 5 mg

Cyclopeptine is a benzodiazepine metabolite produced by a number of species of Penicillium. While there is little literature about the metabolite, there is considerable interest in the enzymes responsible for the biosynthesis of the benzodiazepine nucleus, cyclopeptine synthetase.

CAS Number: 50886-63-0 Molecular Formula: $C_{17}H_{16}N_2O_2$ Molecular Weight: 280.3 Source: Penicillium sp. Purity: >99% by HPLC

Cyclopiazonic acid

Code No.: BIA-C1244 Pack Sizes: 1 mg, 5 mg

Cyclopiazonic acid is a tremorigenic indole produced by several species of Aspergillus and Penicillium. Cyclopiazonic acid is a highly



specific inhibitor of calcium ATPase in sarcoplasmic reticulum, altering calcium homeostasis and ATP-dependent calcium transport and resulting in the release of intracellular stored Ca2+ without increasing IP3.

CAS Number: 18172-33-3 Molecular Formula: $C_{20}H_{20}N_2O_3$ Molecular Weight: 336.4

Source: Penicillium griseofulvum

Purity: >98% by HPLC

Cyclosporin A

Code No.: BIA-C1208 Pack Sizes: 25 mg, 100 mg

Cyclosporin A is a hydrophobic cyclic peptide isolated from several fungal species including Cylindrocarpon, Fusarium, Trichoderma and Tolypocladium. Cyclosporin A inhibits T-cell activation and has been marketed since 1983 as an immunosuppressant in postallogeneic organ transplant. Cyclosporin A acts by binding to the protein, cyclophilin (immunophilin), in T-lymphocytes causing inhibition of calcineurin (protein phosphatase 2B). Cyclosporin A reduces transcription of interleukin 2, and inhibits lymphokine production, interleukin release and NO synthesis induced by interleukin 1a, lipopolysaccharides and TNFa.

 $\begin{array}{lll} \text{CAS Number:} & 59865\text{-}13\text{-}3 \\ \text{Molecular Formula:} & C_{62}H_{111}N_{11}O_{12} \\ \text{Molecular Weight:} & 1202.6 \\ \text{Source:} & \textit{Trichoderma} \text{ sp.} \\ \text{Purity:} & >99\% \text{ by HPLC} \\ \end{array}$

Cyclosporin B

Code No.: BIA-C1245 Pack Sizes: 1 mg, 5 mg

Cyclosporin B is a minor analogue of the cyclosporin complex produced by a number of different fungal genera including Trichoderma, Tolypocladium, Fusarium, Nectria and Acremonium. Cyclosporin B possesses immunosuppressant and antifungal activities but has been much less extensively investigated than the major analogue, cyclosporin A.

CAS Number: 63775-95-1 Molecular Formula: $C_{61}H_{109}N_{11}O_{12}$ Molecular Weight: 1188.6

Source: *Trichoderma* sp. Purity: >97% by HPLC

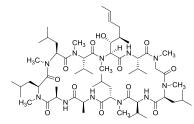
Cyclosporin C

Code No.: BIA-C1246 Pack Sizes: 1 mg, 5 mg

Cyclosporin C is a minor analogue of the cyclosporin complex produced by a number of fungal species, including Trichoderma, Tolypocladium, Fusarium, Nectria and Acremonium. Cyclosporin C possesses immunosuppressant activity but has been much less extensively investigated than the major analogue, cyclosporin A.

Cyclosporin D

Code No.: BIA-C1247 Pack Sizes: 1 mg, 5 mg



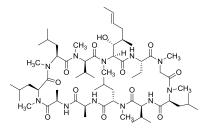
Cyclosporin D is a minor analogue of the cyclosporin family which is only weakly immunologically active. Cyclosporin D is a potent inhibitor of tumor-promoting phorbol esters on mouse skin in vivo, and a potent inhibitor of calcium/calmodulin-dependent EF-2 phosphorylation in vitro.

CAS Number: 63775-96-2
Molecular Formula: C₆₃H₁₁₃N₁₁O₁₂
Molecular Weight: 1216.7

Source: *Trichoderma* sp. Purity: >95% by HPLC

Cyclosporin H

Code No.: BIA-C1248 Pack Sizes: 1 mg, 5 mg



Cyclosporin H is a minor analogue of the cyclosporin family which is immunologically inactive as it does not bind to immunophilin. Cyclosporin H is the most extensively investigated of the minor



cyclosporin analogues . It is a potent inhibitor of tumor-promoting phorbol esters on mouse skin in vivo, and of calcium/calmodulin-dependent EF-2 phosphorylation in vitro, a potent and selective antagonist of formyl peptide receptor and inhibitor of formyl peptide-induced superoxide formation.

CAS Number: 83602-39-5 Molecular Formula: $C_{62}H_{111}N_{11}O_{12}$ Molecular Weight: 1202.6 Source: Trichoderma sp. Purity: >95% by HPLC

Cytochalasin A

Code No.: BIA-C1249 Pack Sizes: 1 mg, 5 mg

Cytochalasin A is one of a family of potent mycotoxins produced by several species of fungi. All members of the class exhibit profound effects on cytoskeletal proteins, giving rise to pronounced morphogenic activity in animals and plants. Like most cytochalasins, cytochalasin A is a potent inhibitor of actin filament function leading to cell death by apotosis and displays a broad range of resultant cellular actions. Despite the common mode of action, there is evidence that individual members of the class display diverse selectivity. Specifically, cytochalasin A is one of the few cytochalasins active against HIV-1 protease.

CAS Number: 14110-64-6 Molecular Formula: $C_{29}H_{35}NO_5$ Molecular Weight: 477.6

Source: Drechslera dematoidea

Purity: >98% by HPLC

Cytochalasin B

Code No.: **BIA-C1250** Pack Sizes: **1 mg, 5 mg**

Cytochalasin B is one of the most extensively studied members of a family of potent mycotoxins produced by several species of fungi. All members of the class exhibit profound effects on cytoskeletal proteins, giving rise to pronounced morphogenic activity in animals and plants. Like most cytochalasins, cytochalasin B is a potent inhibitor of actin filament function leading to cell death by apoptosis, with a broad range of resultant cellular actions. Despite the common mode of action, there is evidence that individual members of this class display diverse selectivity. Lack of comparative co-metabolite analysis has restricted a more complete understanding of their individual selectivity.

CAS Number: 14930-96-2 Molecular Formula: $C_{29}H_{37}NO_5$ Molecular Weight: 479.6

Source: Drechslera dematoidea

Purity: >99% by HPLC

Cytochalasin C

Code No.: BIA-C1169 Pack Sizes: 1 mg, 5 mg

Cytochalasin C is one of a family of potent mycotoxins produced by a range of fungi. All members of the class exhibit profound effects on cytoskeletal proteins, resulting in pronounced morphogenic changes in animals and plants. The cytochalasins act by disrupting actin microfilaments and these effects are most noticeable by the inhibition of cell division.

CAS Number: 22144-76-9 Molecular Formula: $C_{30}H_{37}NO_6$ Molecular Weight: 507.6

Source: *Geniculosporium* sp. Purity: >99% by HPLC

Cytochalasin D

Code No.: BIA-C1170 Pack Sizes: 1 mg, 5 mg

Cytochalasin D is the most studied of the cytochalasins. Like most of the members of this mycotoxin class, cytochalasin D exhibits potent inhibition of actin filament function leading to cell death by apoptosis. This led to early investigation of the metabolite as an antitumor agent. Cytochalasin D has become one of the standard cellular probes for investigating the role of actin in cell biology.

CAS Number: 22144-77-0 Molecular Formula: $C_{30}H_{37}NO_6$ Molecular Weight: 507.6

Source: *Geniculosporium* sp. Purity: >99% by HPLC

Cytochalasin E

Code No.: **BIA-C1251** Pack Sizes: **1 mg, 5 mg**

Cytochalasin E is one of a family of potent mycotoxins produced by a range of fungi. All members of the class exhibit profound effects on cytoskeletal proteins, resulting in pronounced morphogenic changes in animals and plants. Despite the common mode of action, there is evidence that individual members display diverse selectivity. Specifically, cytochalasin E acts as an angiogenesis



inhibitor and, unlike other cytochalasins, does not inhibit glucose transport.

CAS Number: 36011-19-5 Molecular Formula: $C_{28}H_{33}NO_7$ Molecular Weight: 495.6

Source: Aspergillus clavatus
Purity: >99% by HPLC

Cytochalasin H

Code No.: BIA-C1023 Pack Sizes: 1 mg, 5 mg

Cytochalasin H is one of a family of potent mycotoxins produced by a range of fungi. All members of the class exhibit profound effects on cytoskeletal proteins, resulting in pronounced morphogenic changes in animals and plants. In vitro, cytochalasin H exhibits antibacterial, antifungal, nematocidal and antitumor activity.

CAS Number: 53760-19-3 Molecular Formula: $C_{30}H_{39}NO_5$ Molecular Weight: 493.6

Source: *Phomopsis* sp. Purity: >95% by HPLC

Cytochalasin J

Code No.: BIA-C1024 Pack Sizes: 1 mg, 5 mg

Cytochalasin J is one of a family of potent mycotoxins produced by a range of fungi. All members of the class exhibit profound effects on cytoskeletal proteins, which give rise to pronounced morphogenic activity in animals and plants. Cytochalasin J is the deacetyl analogue of cytochalasin H and exhibits similar, though less potent, antibacterial, antifungal, nematocidal and antitumor activities.

CAS Number: 53760-20-6 Molecular Formula: $C_{28}H_{37}NO_4$ Molecular Weight: 451.6 Source: Phomopsis sp. Purity: >95% by HPLC

Daidzein

NEW

Code No.: BIA-D1723 Pack Sizes: 5 mg, 25 mg

Daidzein is an isoflavone found widely in legume and other plant species. It is common in many microbial fermentations containing soy or other related plant-based extracts. Like genistein, daidzein has been widely reported as an antibacterial and anticancer active. Genistein also has antioxidant and bond protective activity, and inhibits calmodulin, reverse transcriptase and tyrosine kinase. Daidzein is an essential dereplication and bioassay standard in microbial natural product discovery. More recently daidzein, as a major component of soy products, has been established as a nutraceutical.

CAS Number: 486-66-8

Molecular Formula: $C_{15}H_{10}O_{4}$ Molecular Weight: 254.2

Source: Glycine sp.

Purity: >95% by HPLC

Dalbavancin

Code No.: BIA-D1382 Pack Sizes: 1 mg, 5 mg

Dalbavancin is a semi-synthetic glycopeptide prepared from A40926 by introducing a positively charged lipophilic moiety in a previously unexplored region of the natural glycopeptide. This modification provides a longer in vivo half life, and improved in vitro activity against a variety of Gram positive and multi-drug resistant isolates such as MRSA and MRSE.

CAS Number: 171500-79-1 Molecular Formula: $C_{88}H_{100}Cl_2N_{10}O_{28}$ Molecular Weight: 1816.7

Source: Semi-synthetic
Purity: >98% by HPLC

Dalfopristin mesylate

Code No.: **BIA-D1355** Pack Sizes: **1 mg, 5 mg**

Dalfopristin is a semi-synthetic analogue of ostreogrycin A (virginiamycin M, pristinamycin IIA, streptogramin A) formed by addition of diethylaminoethylthiol to the 2-pyrroline group of ostreogrycin, followed by oxidation to the sulfone. The structural changes provide a more hydrophobic compound with a readily ionisable group for generating a salt. Dalfopristin is used commercially in synergistic combination with quinupristin (70:30). There is little published data on the synthesis, biological or antibiotic activity of dalfopristin alone, however the combination product is highly effective, including activity against antibiotic resistant strains.



 $\begin{array}{ll} \text{CAS Number:} & 112362\text{-}50\text{-}2 \\ \text{Molecular Formula:} & C_{35}\text{H}_{54}\text{N}_{4}\text{O}_{12}\text{S}_{2} \\ \text{Molecular Weight:} & 787.0 \\ \end{array}$

Source: Semi-synthetic Purity: >98% by HPLC

Daptomycin

Code No.: BIA-D1205 Pack Sizes: 1 mg, 5 mg

Daptomycin is a member of the A 21978 complex of high molecular weight cyclic lipopeptides with potent antibiotic activity, notably against MRSA, VISA and VRSA bacterial strains. Originally isolated from Streptomyces roseosprous by Eli Lily in the 1980s, daptomycin was selected and developed by Cubist Pharmaceuticals for human use. Daptomycin exhibits Ca-dependent depolarisation of the bacterial membrane resulting in loss of membrane potential leading to inhibition of DNA, RNA and protein synthesis which results in cell death.

CAS Number: 103060-53-3 Molecular Formula: $C_{72}H_{101}N_{17}O_{26}$ Molecular Weight: 1620.7

Source: Streptomyces sp. Purity: >95% by HPLC

Davercin

Code No.: **BIA-E1433** Pack Sizes: **1 mg, 5 mg**

Davercin (erythromycin A cyclic 11,12-carbonate) is a first generation semi-synthetic erythromycin. Davercin is prepared by coupling the 11- and 12-OH groups to form a cyclic carbonate. This simple modification improves the stability and hydrophobicity of the macrocyclic structure. Davercin shows comparable or better in vitro potency, low host toxicity and improved pharmacokinetics compared with erythromycin.

CAS Number: 55224-05-0 Molecular Formula: $C_{38}H_{65}NO_{14}$ Molecular Weight: 759.9

Source: Semi-synthetic Purity: >98% by HPLC

Deacetylanisomycin

Code No.: BIA-D1368 Pack Sizes: 5 mg, 25 mg

Deacetylanisomycin is the core structure of a family of dihydroxypyrrolidines produced by several species of Streptomyces. Anisomycin esters are potent inhibitors of protein synthesis. While considered inactive, deacetylanisomycin is a potent growth regulator in plants and its underlying pharmacology is poorly researched. This is all the more significant as anisomycin undergoes facile hydrolysis to deacetylanisomycin in vivo and in polar solvents in vitro.

CAS Number: 27958-06-1 Molecular Formula: $C_{12}H_{17}NO_3$ Molecular Weight: 223.3

Source: Streptomyces griseolus

Purity: >99% by HPLC

Deacetylravidomycin

Code No.: BIA-D1074 Pack Sizes: 0.5 mg, 2.5 mg

O-Deacetylravidomycin is the more active and stable analogue of the ravidomycin complex produced by Streptomyces ravidus. The metabolite shows potent, light-dependent antitumor activity. O-Deacetylravidomycin, like the related gilvocarcins and chrysomycins, is thought to act as a topoisomerase II inhibitor.

CAS Number: 88580-27-2 Molecular Formula: $C_{29}H_{31}NO_8$ Molecular Weight: 521.6

Source: Streptomyces sp. Purity: >95% by HPLC

Decanoyl-L-homoserine lactone

Code No.: BIA-D1497 Pack Sizes: 5 mg, 25 mg

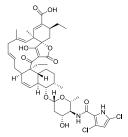
Decanoyl-L-homoserine lactone is an active quorum sensing modulator first recognised in Burkholderia pseudomallei. Decanoyl-L-homoserine lactone and other acylhomoserine lactones have been detected in hundreds of bacterial species and while the homologues vary between species and strains, the homoserine lactones are the major chemical modulators of within and between cell communication and regulation. The most significant variable defining the function of the homoserine lactone is the length of the acyl chain, with shorter chains displaying opposing actions to the longer chains.

CAS Number: 177315-87-6 Molecular Formula: $C_{14}H_{25}NO_3$ Molecular Weight: 255.4 Source: Synthetic Purity: >99% by HPLC



Decatromicin B

Code No.: BIA-D1412 Pack Sizes: 0.5 mg, 2.5 mg



Decatromicin B is a tetronic acid isolated from a strain of Actinomadura in 1999. Decatromicin B is a potent antibiotic with activity against antibiotic sensitive and resistant strains such as MRSA. Lack of availability has hampered further investigation into the mode of action or antibacterial spectrum of the decatromicins.

 $\begin{array}{lll} \text{CAS Number:} & 235097\text{-}64\text{-}0 \\ \text{Molecular Formula:} & C_{45}H_{56}CI_2N_2O_{10} \end{array}$

Molecular Weight: 855.9

Source: Streptomyces sp. Purity: >95% by HPLC

Deethylindanomycin

Code No.: BIA-D1288 Pack Sizes: 1 mg, 5 mg

Deethylindanomycin (omomycin) is an unusual pyrrollic ionophore related to indanomycin, with activity against Gram positive bacteria and coccidia. Lack of availability has limited further investigation of this compound.

CAS Number: 117615-33-5 Molecular Formula: $C_{29}H_{39}NO_4$ Molecular Weight: 465.6

Source: Streptomyces sp. Purity: >95% by HPLC

10,11-Dehydrocurvularin

Code No.: BIA-D1399 Pack Sizes: 1 mg, 5 mg

Dehydrocurvularin is a 12-membered macrocyclic lactone incorporating a resorcinyl moiety, produced by a number of fungal species including Curvularia, Penicillium and Alternaria. Dehydrocurvularin inhibits cell division by disrupting mitotic spindle formation and acts as a developmental regulator by inhibiting self-sporulation in Alternaria alternata. More recently dehydrocurvularin has been shown to have antimalarial activity.

CAS Number: 1095588-70-7 Molecular Formula: $C_{16}H_{18}O_{5}$ Molecular Weight: 290.3

Source: Curvularia sp.
Purity: >98% by HPLC

Dehydrocyclopeptine

Code No.: BIA-D1155 Pack Sizes: 1 mg, 5 mg

Dehydrocyclopeptine is a benzodiazepine metabolite produced by a number of species of Penicillium. While there is little literature about the metabolite, there is considerable interest in the enzymes responsible for the biosynthesis of the benzodiazepine nucleus, cyclopeptine synthetase.

CAS Number: 31965-37-4
Molecular Formula: $C_{17}H_{14}N_2O_2$ Molecular Weight: 278.3
Source: Penicillium sp.
Purity: >99% by HPLC

Demeclocycline

Code No.: BIA-D1462 Pack Sizes: 5 mg, 25 mg

Demeclocycline, a chlortetracycline analogue produced by a mutagenised strain of Streptomyces aureofaciens, was first isolated in 1957. Like all tetracyclines, demeclocycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal subunits, blocking protein synthesis. Demeclocycline has been extensively cited in the literature with over 800 references relating almost exclusively to in vivo use.

CAS Number: 127-33-3 Molecular Formula: $C_{21}H_{21}CIN_2O_8$ Molecular Weight: 468.9

Source: Streptomyces sp. Purity: >98% by HPLC

Demeclocycline hydrochloride

Code No.: BIA-D1463 Pack Sizes: 5 mg, 25 mg

Demeclocycline hydrochloride is a salt prepared from demeclocycline taking advantage of the basic dimethylamino group which protonates and readily forms a salt in hydrochloric acid solutions. The hydrochloride is the preferred formulation for pharmaceutical applications. Like all tetracyclines, demeclocycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal subunits, blocking protein synthesis.

CAS Number: 64-73-3 Molecular Formula: $C_{21}H_{22}Cl_2N_2O_8$ Molecular Weight: 501.3

Source: Streptomyces sp. Purity: >98% by HPLC



Demethoxyviridiol

Code No.: BIA-D1025 Pack Sizes: 1 mg, 5 mg

Demethoxyviridiol is a fungal metabolite belonging to the wortmannin and viridin classes. An inhibitor of phosphatidylinositol 3-kinase, demethoxyviridiol affects phospholipid signalling and proliferation of Swiss 3T3 cells.

CAS Number: 56617-66-4 Molecular Formula: $C_{19}H_{16}O_5$ Molecular Weight: 324.3

Source: *Nodulisporium* sp. Purity: >95% by HPLC

N-Demethylerythromycin A

Code No.: BIA-D1352 Pack Sizes: 1 mg, 5 mg

N-Demethylerythromycin A is a minor co-metabolite of erythromycin produced by Saccharopolyspora erythreae. N-Demethylerythromycin A exhibits a very narrow spectrum of antibiotic activity and is much less active than erythromycins A, B and C.

CAS Number: 992-62-1 Molecular Formula: $C_{36}H_{65}NO_{13}$ Molecular Weight: 719.9

Source: Saccharopolyspora erythraea

Purity: >98% by HPLC

Deoxybrevianamide E

Code No.: BIA-D1174 Pack Sizes: 1 mg, 5 mg

Deoxybrevianamide E is an alkaloidal diketopiperazine derived from tryptophan and proline, isolated from Aspergillus and Penicillium species. There are no reports of intensive investigation of deoxybrevianamide E.

CAS Number: 34610-68-9
Molecular Formula: C21H25N3O2
Molecular Weight: 351.4
Source: Penicillium s

Source: Penicillium sp.
Purity: >99% by HPLC

Deoxyenterocin

Code No.: BIA-D1332 Pack Sizes: 1 mg, 5 mg

Deoxyenterocin is a minor co-metabolite of enterocin produced by several species of Streptomyces. Interestingly, deoxyenterocin was first isolated from an ascidian. Like enterocin, deoxyenterocin exhibits activity against both Gram positive and Gram negative bacteria but lack of availability has restricted a more extensive evaluation.

CAS Number: 108605-51-2 Molecular Formula: $C_{22}H_{20}O_9$ Molecular Weight: 428.4

Source: Streptomyces sp. Purity: >99% by HPLC

Deoxyfusapyrone

Code No.: BIA-F1437 Pack Sizes: 1 mg, 5 mg

Deoxyfusapyrone is a broad spectrum antifungal metabolite isolated from several Fusarium species, first reported in 1994. Deoxyfusapyrone exhibits low zoo-toxicity as evidenced by a lack of toxicity against Artemia salina and is a useful candidate for control of postharvest crop diseases. Like the related fusapyrone, its mechanism of action is unknown and its structure was revised in 2006.

CAS Number: 156856-32-5 Molecular Formula: $C_{34}H_{54}O_8$ Molecular Weight: 590.8 Source: Fusarium sp. Purity: >98% by HPLC

Deoxyviolacein

Code No.: BIA-D1328 Pack Sizes: 0.5 mg, 2.5 mg

Deoxyviolacein is a minor, more hydrophobic co-metabolite of violacein. While its presence has been long recognised in "purified" violacein, separation of deoxyviolacein has not been undertaken. Lack of availability has restricted more extensive investigation of deoxyviolacein.

CAS Number: 5839-61-2 Molecular Formula: $C_{20}H_{13}N_3O_2$ Molecular Weight: 327.3

Source: Chromobacterium violaceum

Purity: >99% by HPLC



Derquantel

Code No.: BIA-D1514 Pack Sizes: 5 mg, 25 mg

H₃C NOH

Derquantel is a semi-synthetic paraherquamide analogue prepared by removal of the 2-oxo group in a four-step sequence of N-protection, reduction, N-deprotection and a final reduction. Derquantel is a potent nematocide and was the first paraherquamide to be successfully commercialised in combination with avermectin. Derquantel, like other paraherquamides, induces a flaccid paralysis in nematodes thought to be due to inhibition of nicotinic acetylcholine receptors acting as an antagonist of acetylcholine.

 $\begin{array}{lll} \text{CAS Number:} & 187865\text{-}22\text{-}1 \\ \text{Molecular Formula:} & C_{28}H_{37}N_3O_4 \\ \text{Molecular Weight:} & 479.6 \\ \end{array}$

Source: Semi-synthetic Purity: >98% by HPLC

Desertomycin A

Code No.: BIA-D1294 Pack Sizes: 1 mg, 5 mg

Desertomycin A is a 42-membered macrocyclic lactone with broad spectrum activity against Gram positive and Gram negative bacteria, yeasts and fungi. There has been little investigation into the mode of action of desertomycin A.

CAS Number: 121820-50-6 Molecular Formula: $C_{61}H_{109}NO_{21}$ Molecular Weight: 1192.5

Source: Streptomyces sp. Purity: >95% by HPLC

10'-Desmethoxystreptonigrin

Code No.: BIA-S1088 Pack Sizes: 0.5 mg, 2.5 mg

10'-Desmethoxystreptonigrin is a close analogue of streptonigrin produced by selected Streptomyces species. It is a moderately potent inhibitor of farnesylation of RAS P21 protein, 3-fold more active than streptonigrin. 10'-Desmethoxystreptonigrin has also been reported to have potent and broad spectrum antibacterial and antitumor activity.

CAS Number: 136803-89-9 Molecular Formula: $C_{24}H_{20}N_4O_7$

Molecular Weight: 476.4

Source: Streptomyces sp. Purity: >95% by HPLC

Desotamide

Code No.: BIA-D1026 Pack Sizes: 0.5 mg, 2.5 mg

The cyclic hexapeptide, desotamide, was first isolated from a Streptomyces sp. found to produce salinamide A, an inhibitor of bacterial RNA polymerase. Little is known of desotamide's intrinsic activity or potency.

CAS Number: 194660-14-5 Molecular Formula: $C_{35}H_{52}N_8O_7$ Molecular Weight: 696.8

Source: Streptomyces sp. Purity: >95% by HPLC

Diacetylcercosporin

Code No.: BIA-D1607 Pack Sizes: 1 mg, 5 mg

Diacetylcercosporin is a minor hydrophobic analogue of cercosporin produced by several species of the fungal genera, Cercospora and Septoria. Diacetylcercosporin has moderate in vitro activity against Leishmania and chloroquine-sensitive strains of Plasmodium falciparum. Diacetylcercosporin exhibits antitumor activity. Like other perylenequinones, the biological activity of diacetylcercosporin is significantly enhanced on light activation.

CAS Number: 62574-06-5
Molecular Formula: C₃₄H₃₂O₁₂
Molecular Weight: 632.6
Source: Cercospora

Source: *Cercospora* sp. Purity: >95% by HPLC

Diacetylphloroglucinol

Code No.: BIA-D1389 Pack Sizes: 5 mg, 25 mg

Diacetylphloroglucinol (DAPG) is a small molecular weight phenolic metabolite belonging to the phloroglucinol (1,3,5-trihydroxybenzene) family produced by bacteria, including Pseudomonas strains. DAPG exhibits a broad range of biological activities with mostly low potency. In the search for novel actives, DAPG and related metabolites are important for dereplication to eliminate leads due to high amounts of weakly potent actives. Although weakly active, this family appears to be important in the biocontrol of plant diseases by some Pseudomonas strains.



CAS Number: 2161-86-6 Molecular Formula: $C_{10}H_{10}O_5$ Molecular Weight: 210.2

Source: Pseudomonas fluorescens

Purity: >95% by HPLC

Diffractaic acid

NEW

Code No.: **BIA-D1670** Pack Sizes: **0.5 mg, 2.5 mg**

Diffractaic acid is a β -orcinol depside isolated from a broad range of lichen species. Like other lichen acids, diffractaic acid has been detected as an active in a diverse range of in vitro bioassays and displays complex pharmacology as an analgesic, antipyretic, antimicrobial, plant growth inhibitor, insecticide and antitumor agent. Diffractaic acid is an important standard in the chemotaxonomy of lichens and its occurrence, use and activity are covered in over 100 entries in Scifinder up to 2016.

CAS Number: 436-32-8 Molecular Formula: $C_{19}H_{20}O_{7}$ Molecular Weight: 360.4 Source: Cladia sp. Purity: >95% by HPLC

Dihydroaeruginoic acid

Code No.: BIA-D1392 Pack Sizes: 5 mg, 25 mg

Dihydroaeruginoic acid is a simple aromatic siderophore produced by several species of Pseudomonas. Dihydroaeruginoic acid exhibits antibacterial, antifungal and antitumor activity.

CAS Number: 143209-04-5 Molecular Formula: $C_{10}H_9NO_3S$ Molecular Weight: 223.3

Source: Pseudomonas aeruginosa

Purity: >98% by HPLC

Dihydrocyclosporin A

Code No.: **BIA-D1252** Pack Sizes: **1 mg, 5 mg**

Dihydrocyclosporin A is a closely related co-metabolite of cyclosporin A. Dihydrocyclosporin A possesses no immunosuppressant activity and has found use as a control to determine the role of immunosuppression in the pharmacology of cyclosporin A, particularly in the treatment of parasitic infections.

CAS Number: 59865-15-5
Molecular Formula: C₆₂H₁₁₃N₁₁O₁₂
Molecular Weight: 1204.6

Source: *Trichoderma* sp. Purity: >98% by HPLC

Dihydropleuromutilin

Code No.: BIA-D1526 Pack Sizes: 5 mg, 25 mg

Dihydropleuromutilin is a semi-synthetic pleuromutilin formed by selective reduction of the ethene to ethyl. Dihydropleuromutilin exhibits comparable antibiotic potency to pleuromutilin. Extensive studies have been undertaken on semi-synthetic dihydropleuromutilin analogues but the parent compound has received only limited attention.

CAS Number: 42302-24-9 Molecular Formula: $C_{22}H_{36}O_5$ Molecular Weight: 380.5

Source: Semi-synthetic Purity: >95% by HPLC

Dihydrospinosyn A aglycone

Code No.: **BIA-D1599** Pack Sizes: **0.5 mg, 2.5 mg**

Dihydrospinosyn A aglycone is an acid degradation product produced by hydrolysis of both saccharide groups of 3'-ethoxy-5,6-dihydrospinosyn J, the major component of the commercial insecticide, Spinetoram. Dihydrospinosyn A aglycone is only weakly active as an insecticide as the saccharides are considered essential for potent activity. Despite the importance of spinosyns as agro-chemical insecticides, there are few published reports of the biological activity or the levels of dihydrospinosyn A aglycone in the environment.

CAS Number: 727695-12-7 Molecular Formula: $C_{24}H_{36}O_5$ Molecular Weight: 404.5

Source: Semi-synthetic Purity: >95% by HPLC

1,6-Dimethoxyphenazine

Code No.: BIA-D1523 Pack Sizes: 1 mg, 5 mg

1,6-Dimethoxyphenazine is a simple phenazine produced by several species of Streptomyces. Dimethoxyphenazine is a weakly active antibacterial metabolite with activity against mycobacteria. Dimethoxyphenazine and related phenazines are important dereplication standards in discovery research to eliminate leads due to high amounts of weakly potent actives.

CAS Number: 13398-79-3 Molecular Formula: $C_{14}H_{12}N_2O_2$ Molecular Weight: 240.3

Source: Streptomyces sp. Purity: >98% by HPLC

Dinactin

Code No.: BIA-D1027 Pack Sizes: 1 mg, 5 mg

Dinactin is a member of the macrotetrolide complex produced by a range of Streptomyces species. It is a monovalent cation ionophore with high selectivity for ammonium and potassium. Dinactin inhibits T-cell proliferation induced by IL-2 and cytokine production at nanomolar levels for IL-2, IL-4, IL-5 and interferon-y. Dinactin has not previously been available for intensive investigation.

CAS Number: 20261-85-2 Molecular Formula: $C_{42}H_{68}O_{12}$ Molecular Weight: 765.0

Source: Streptomyces sp. Purity: >95% by HPLC

Dipicolinic acid

Code No.: BIA-D1573 Pack Sizes: 5 mg, 25 mg

OH OH

Dipicolinic acid is an amphoteric polar metabolite produced by many bacterial and fungal species. Prior to its discovery as a microbial metabolite, dipicolinic acid had long been recognised as a chelating agent for many metal ions. Wide distribution of dipicolinic acid among microbes makes it an important dereplication standard in discovery. Dipicolinic acid reaches high concentrations ($\sim 10\%$ w/w) in Bacillus endospores aiding heat resistance and is used in laboratories as a marker for the effectiveness of sterilisation.

CAS Number: 499-83-2
Molecular Formula: C₇H₅NO₄
Molecular Weight: 167.1

Source: Beauveria sp.
Purity: >95% by HPLC

Dirithromycin

Code No.: BIA-D1314 Pack Sizes: 5 mg, 25 mg

HO HOH N(CH₃)₂

Dirithromycin is a macrolide antibiotic pro-drug of 9S-erythromycylamine, a close analogue of erythromycin in which the 9-keto group is replaced with an amino group in the S-configuration. Although erythromycylamine overcomes the acid

instability of erythromycin, it is poorly absorbed following oral administration. Dirithromycin is formed by reacting erythromycylamine with an aldehyde to form a Schiff base which undergoes cyclisation to an oxazine with the C11-alcohol. Dirithromycin provides higher tissue levels and prolonged in vivo half-life by slowly releasing erythromycylamine.

CAS Number: 62013-04-1 Molecular Formula: $C_{42}H_{78}N_2O_{14}$ Molecular Weight: 835.1

Source: Semi-synthetic Purity: >98% by HPLC

Dodecanoyl-L-homoserine lactone

Code No.: BIA-D1498 Pack Sizes: 5 mg, 25 mg

Dodecanoyl-L-homoserine lactone is an active quorum sensing modulator first recognised in Sinorhizobium meliloti. N-Acylhomoserine lactones have been detected in hundreds of bacterial species and, while the homologues vary between species and strains, the homoserine lactones are the major chemical modulators of within and between cell communication and regulation. The most significant variable defining the function of the homoserine lactone is the length of the acyl chain, with shorter chains displaying opposing actions to the longer chains.

CAS Number: 137173-46-7 Molecular Formula: $C_{16}H_{29}NO_3$ Molecular Weight: 283.4 Source: Synthetic Purity: >99% by HPLC

Doramectin

Code No.: BIA-D1301 Pack Sizes: 5 mg, 25 mg

Doramectin is a biosynthetic avermectin derived from a mutant strain of Streptomyces avermitilis, supplemented with a cyclohexylcaboxylic acid starting unit. Doramectin was developed as an anthelmintic for internal parasite control. The presence of the cyclohexyl group replacing the sec-butyl moiety affords greater hydrophobicity and longer biological half-life compared to avermectin. Like the other milbemycin/avermectins, doramectin selectively binds to parasite glutamate-gated chloride ion channels and disrupts neurotransmission leading to paralysis and death of the parasite.

CAS Number: 117704-25-3 Molecular Formula: $C_{50}H_{74}O_{14}$ Molecular Weight: 899.1

Source: Streptomyces sp. Purity: >99% by HPLC



Doramectin aglycone

Code No.: BIA-D1584 Pack Sizes: 1 mg, 5 mg

Doramectin aglycone is an acid degradation product produced by hydrolysis of the disaccharide unit of doramectin. Doramectin aglycone is an inhibitor of nematode larval development, but is devoid of paralytic activity. Despite the importance of doramectin as an anthelmintic in animal health, there are no published reports of the biological activity or the levels of doramectin aglycone in animals or in the environment.

CAS Number: 1987883-26-0 Molecular Formula: $C_{36}H_{50}O_8$ Molecular Weight: 610.7

Source: Semi-synthetic Purity: >95% by HPLC

Doramectin monosaccharide

Code No.: BIA-D1582 Pack Sizes: 1 mg, 5 mg

Doramectin monosaccharide is an acid degradation product produced by selective hydrolysis of the terminal saccharide unit of doramectin. Doramectin monosaccharide is a potent inhibitor of nematode larval development, but is devoid of paralytic activity. Despite the importance of doramectin as an anthelmintic in animal health, there are no published reports of the biological activity or the levels of doramectin monosaccharide in animals or in the environment.

 $\begin{array}{lll} \text{CAS Number:} & 165108\text{-}44\text{-}1 \\ \text{Molecular Formula:} & C_{43}H_{62}O_{11} \\ \text{Molecular Weight:} & 755.0 \\ \end{array}$

Source: Semi-synthetic Purity: >95% by HPLC

Δ²-Doramectin

Code No.: BIA-D1580 Pack Sizes: 1 mg, 5 mg

 $\Delta^2\text{-Doramectin}$ is an irreversible base degradation product of doramectin found in animals treated with doramectin and in the environment. $\Delta^2\text{-Doramectin}$ is formed by rearrangement of the naturally occurring $\Delta^3\text{-group}$ in doramectin to the 2-position. Despite the importance of doramectin as an anthelmintic in animal health, there are no published reports of the biological activity or the levels of $\Delta^2\text{-doramectin}$ in animals or in the environment.

CAS Number: 1987882-63-2
Molecular Formula: C₅₀H₇₄O₁₄
Molecular Weight: 899.1
Source: Semi-synthetic
Purity: >95% by HPLC

epi-Doramectin

Code No.: BIA-D1577 Pack Sizes: 1 mg, 5 mg

 $epi\text{-}\mathrm{Doramectin}$ is a base-catalysed intermediate in the decomposition of doramectin. $epi\text{-}\mathrm{Doramectin}$ is formed by epimerisation at the 2-position which ultimately rearranges irreversibly to the isomeric alkene analogue, $\Delta^2\text{-}\mathrm{doramectin}$. Despite the importance of doramectin as an anthelmintic in animal health, there are no published reports of the biological activity or the levels of $epi\text{-}\mathrm{doramectin}$ in animals or the environment.

 $\begin{array}{lll} \text{CAS Number:} & 1987882\text{-}62\text{-}1 \\ \text{Molecular Formula:} & \text{C}_{50}\text{H}_{74}\text{O}_{14} \\ \text{Molecular Weight:} & 899.1 \\ \end{array}$

Source: Semi-synthetic Purity: >95% by HPLC

Doripenem



Code No.: BIA-D1664 Pack Sizes: 5 mg, 25 mg

Doripenem, a semi-synthetic carbapenem antibiotic featuring an unusual sulfamoylamino terminus, was commercially developed in the early 1990s by Shionogi Co., Japan. Doripenem acts by preventing bacterial cell wall growth by binding to penicillin-binding proteins. Doripenem possesses a broad antibacterial spectrum of action against Gram positive and Gram negative bacteria, including Pseudomonas, and is stable to most β -lactamases. Dorapenem is supplied as the hydrate.

CAS Number: 148016-81-3 Molecular Formula: $C_{15}H_{24}N_4O_6S_2$ Molecular Weight: 420.5 Source: Synthetic Purity: >95% by HPLC

Doxorubicin

Code No.: BIA-D1229 Pack Sizes: 25 mg, 100 mg



Doxorubicin (adriamycin) is the most extensively studied of a family of highly fluorescent anthracycline antibiotics produced by several Streptomyces species, first reported in 1967 and later approved for human therapeutic use as an antitumor agent for the treatment of a wide range of cancers. Doxorubicin also exhibits anti-HIV and antibacterial activity. The mode of action of doxorubicin is thought to be due to intercalation of DNA and inhibition of nucleic acid synthesis.

CAS Number: 23214-92-8 Molecular Formula: $C_{27}H_{29}NO_{11}$ Molecular Weight: 543.5

Source: Streptomyces peucetius

Purity: >99% by HPLC

Doxorubicin hydrochloride

Code No.: BIA-D1202 Pack Sizes: 25 mg, 100 mg

Doxorubicin hydrochloride (adriamycin hydrochloride) is an antitumor agent that has been formulated as a salt to achieve higher water solubility. While the salt shares the same pharmacological properties as doxorubicin free base, its greater water solubility may offer advantages in some in vitro applications. Physicochemical properties and chromatographic behaviour will depend on whether the pH is buffered. In non-pH controlled systems the free base and salt may behave differently.

CAS Number: 25316-40-9 Molecular Formula: $C_{27}H_{30}CINO_{11}$ Molecular Weight: 580.0

Source: Streptomyces peucetius

Purity: >99% by HPLC

Doxycycline

Code No.: BIA-D1469 Pack Sizes: 5 mg, 25 mg

Doxycycline is a semi-synthetic tetracycline prepared by hydrogenolysis of oxytetracycline to remove the 6-hydroxy group. Although the synthesis was reported in 1958, it was not released for use until 1967. Doxycycline, together with minocycline, is regarded as a 'third generation' tetracycline largely replacing the analogues and pro-drugs produced in the early 1960s for mainstream antibiotic applications. Like all tetracyclines, doxycycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal subunits, blocking protein synthesis. Doxycycline has been extensively cited in the literature with over 10,000 references.

>98% by HPLC

CAS Number: 564-25-0 Molecular Formula: $C_{22}H_{24}N_2O_8$ Molecular Weight: 444.4 Source: Semi-synthetic

Purity:

Doxycycline hydrochloride

Code No.: BIA-D1470 Pack Sizes: 5 mg, 25 mg

Doxycycline hydrochloride is a salt prepared from doxycycline taking advantage of the basic dimethylamino group which protonates and readily forms a salt in hydrochloric acid solutions. The hydrochloride is the preferred formulation for pharmaceutical applications. Like all tetracyclines, doxycycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal subunits, blocking protein synthesis.

CAS Number: 10592-13-9
Molecular Formula: C22H25CIN2O8
Molecular Weight: 480.9

Source: Semi-synthetic Purity: >98% by HPLC

Drimentine A

Code No.: BIA-D1394 Pack Sizes: 1 mg, 5 mg

Drimentine A belongs to a novel class of antibiotics, possessing a new terpenylated diketopiperazine structure, with antibiotic, antifungal and anthelmintic activity. The mode of action of drimentine A has received little attention to date.

CAS Number: 204398-90-3 Molecular Formula: $C_{32}H_{45}N_3O_2$ Molecular Weight: 503.7

Source: Streptomyces sp. Purity: >98% by HPLC

Drimentine B

Code No.: BIA-D1395 Pack Sizes: 1 mg, 5 mg



Drimentine B belongs to a novel class of antibiotics, possessing a new terpenylated diketopiperazine structure, with antibiotic, antifungal and anthelmintic activity. The mode of action of drimentine B has received little attention to date.

CAS Number: 204398-91-4 Molecular Formula: $C_{31}H_{39}N_3O_2$ Molecular Weight: 485.7

Source: Streptomyces sp. Purity: >98% by HPLC



Drimentine C

Code No.: BIA-D1396 Pack Sizes: 1 mg, 5 mg



Drimentine C belongs to a novel class of antibiotics, possessing a new terpenylated diketopiperazine structure, with antibiotic, antifungal and anthelmintic activity. The mode of action of drimentine C has received little attention to date.

CAS Number: 204398-92-5 Molecular Formula: $C_{31}H_{41}N_3O_2$ Molecular Weight: 487.7

Source: Streptomyces sp. Purity: >98% by HPLC

Duclauxin



Code No.: BIA-D1667 Pack Sizes: 0.5 mg, 2.5 mg

Duclauxin is a dimeric oxaphenalenone isolated from Penicillium duclauxii by researchers at Tokyo University in 1965. The structure of duclauxin was determined by X-ray crystallography of bromoduclauxin. Duclauxin inhibits mammalian tumor cell line growth and appears to act as a potent uncoupler of oxidative phosphorylation. Duclauxin is a useful standard for chemotaxonomy of Penicillium and Talaromyces species.

CAS Number: 1732-37-2 Molecular Formula: $C_{29}H_{22}O_{11}$ Molecular Weight: 546.5

Source: Aspergillus sp. Purity: >95% by HPLC

Echinocandin B

Code No.: BIA-E1253 Pack Sizes: 1 mg, 5 mg

Echinocandin B is the major analogue of a family of lipopeptides isolated from several species of Aspergillus, reported in 1974. Echinocandin B is a potent antifungal and acts by inhibiting the synthesis of $\beta\text{-}(1,3)\text{-}D\text{-}glucan,}$ an essential component of the cell wall of susceptible fungi.

CAS Number: 54651-05-7Molecular Formula: $C_{52}H_{81}N_7O_{16}$ Molecular Weight: 1060.4Source: Aspergillus sp.
Purity: >95% by HPLC

Echinulin



Code No.: BIA-E1684 Pack Sizes: 1 mg, 5 mg



Echinulin is a diketopiperazine isolated originally from Aspergillus echinulatus by Quilico and Cardini, University of Florence, Italy in 1943. Echinulin is a unique secondary metabolite with the tryptophan component comprising a triprenylated indole in the 2-, 5- and 7- positions. The high level of prenylation and the "reverse" incorporation of the 2-prenyl group stimulated a large number of articles on the metabolite's biosynthesis. Echinulin has pulmonary and hepatic toxicity but despite extensive interest, its pharmacology is largely unexplored.

CAS Number: 1859-87-6 Molecular Formula: $C_{29}H_{39}N_3O_2$ Molecular Weight: 461.6 Source: Aspergillus sp. Purity: >95% by HPLC

Elaiophylin

Code No.: BIA-E1028 Pack Sizes: 1 mg, 5 mg

Elaiophylin is a highly characteristic metabolite produced by Streptomyces hygroscopicus. Elaiophylin inhibits testosterone 5-reductase. Elaiophylin is synergistic with its co-metabolite, rapamycin, as an antifungal. Elaiophylin also has anthelmintic and immunosuppressive activity and inhibits NO synthesis. Elaiophylin displays broad, albeit weak, biological activity against bacteria, nematodes, protozoa and mammalian tumor cells.

CAS Number: 37318-06-2 Molecular Formula: $C_{54}H_{88}O_{18}$ Molecular Weight: 1025.3

Source: Streptomyces hygroscopicus

Purity: >95% by HPLC

Elasnin



Code No.: BIA-E1645 Pack Sizes: 1 mg, 5 mg

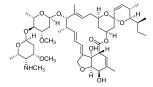
Elasnin was discovered as an inhibitor of human leukocyte elastase from Streptomyces noboritoensis by Omura and co-workers at the Kitasato Institute, Japan in 1978. Elasnin is a hydrophobic 4-hydroxypyrone with alkyl chains in the 3, 5 and 6-positions. The selective activity of elasnin for granulocyte elastase provides alternative strategies for developing new actives for the treatment of arthritis, inflammation, emphysema, and pancreatitis.

CAS Number: 68112-21-0 Molecular Formula: $C_{24}H_{40}O_4$ Molecular Weight: 392.6

Source: Streptomyces sp. Purity: >95% by HPLC

Emamectin B1a

Code No.: BIA-E1545 Pack Sizes: 1 mg, 5 mg



Emamectin B1a is a semi-synthetic 4"-epimethylamino analogue of avermectin B1a prepared by oxidation of the 4"-hydroxy moiety and reductive amination. The introduction of the methylamino group greatly enhances the insecticidal potency of the avermectin class. Emamectin B1a, as a benzoate salt, is the major component (>90%) of the commercial insecticide/acaricide, emamectin. Members of the avermectin/milbemycin class exert their insecticidal/anthelmintic effects by binding to glutamate-gated chloride channels expressed on nematode neurones and pharyngeal muscle cells.

CAS Number: 121124-29-6 Molecular C₄₉H₇₅NO₁₃

Formula:

Molecular 886.1

Weight:

Source: Semi-synthetic Purity: >99% by HPLC

Emodin



Code No.: BIA-E1706 Pack Sizes: 1 mg, 5 mg

Emodin is an anthraquinone pigment widely distributed in fungi and plants with a long tradition of use in herbal medicines. Structurally, emodin is 1,3,8-trihydroxy-6-methylanthraquinone and, like many simple anthraquinones, demonstrates a broad biological profile with weak to moderate antimicrobial, insecticidal and antitumor activity. More recently, emodin has been identified as a potent

inhibitor of Lck, 11β -hydroxysteroid dehydrogenase Type 1 and monoamine oxidase, among other pathways. Emodin has been extensively researched with over 6,000 citations in Scifinder. Emodin is an important standard for chemical and bioassay dereplication of microbial extracts.

CAS Number: 518-82-1 Molecular Formula: $C_{15}H_{10}O_{5}$ Molecular Weight: 270.2 Source: Penicillium sp. Purity: >95% by HPLC

Enniatin A

Code No.: BIA-E1165 Pack Sizes: 0.5 mg, 2.5 mg

Enniatins are a family of depsipeptide ionophores, produced by several Fusarium species. Recently, the effects of the enniatins on acyl-CoA cholesterol transferase, transporters and the selectivity of their antitumor action have received more focus. Enniatin A is one of four major analogues of the enniatin complex.

CAS Number: 2503-13-1
Molecular Formula: $C_{36}H_{63}N_3O_9$ Molecular Weight: 681.9
Source: Fusarium sp.
Purity: >99% by HPLC

Enniatin A1

Code No.: BIA-E1166 Pack Sizes: 1 mg, 5 mg

Enniatins are a family of depsipeptide ionophores produced by several Fusarium species. Recently, the effects of the enniatins on acyl-CoA cholesterol transferase, transporters and the selectivity of their antitumor action have received more focus. Enniatin A1 is one of four major analogues of the enniatin complex .

CAS Number: 4530-21-6 Molecular Formula: $C_{35}H_{61}N_3O_9$ Molecular Weight: 667.9 Source: Fusarium sp. Purity: >99% by HPLC

Enniatin B

Code No.: BIA-E1167 Pack Sizes: 1 mg, 5 mg



Enniatins are a family of depsipeptide ionophores produced by several Fusarium species. Recently, the effects of the enniatins on acyl-CoA cholesterol transferase, transporters and the selectivity of their antitumor action have received more focus. Enniatin B is the most studied of four major analogues of the enniatin complex.

CAS Number: 917-13-5
Molecular Formula: $C_{33}H_{57}N_3O_9$ Molecular Weight: 639.8
Source: Fusarium sp.
Purity: >99% by HPLC

Enniatin B1

Code No.: BIA-E1168 Pack Sizes: 1 mg, 5 mg

Enniatins are a family of depsipeptide ionophores produced by several Fusarium species. Recently, the effects of the enniatins on acyl-CoA cholesterol transferase, transporters and the selectivity of their antitumor action have received more focus. Enniatin B1 is one of four major analogues of the enniatin complex.

CAS Number: 19914-20-6 Molecular Formula: $C_{34}H_{59}N_3O_9$ Molecular Weight: 653.9 Source: Fusarium sp. Purity: >99% by HPLC

Enniatin complex

Code No.: BIA-E1071 Pack Sizes: 10 mg, 50 mg

Enniatins are a complex of depsipeptides produced by several Fusarium species. Typically, the complex contains 4 major components: A, A1, B and B1 together with minor amounts of enniatins C, D, E and F. The enniatins act as ionophores. Recently their effects on acyl-CoA cholesterol transferase, as nematocides and the selectivity of their antitumor action have received more focus.

CAS Number: 11113-62-5 Molecular Formula: $C_{33}H_{57}N_3O_9$ (for B)

Molecular Weight: 639.8
Source: Fusarium sp.
Purity: >95% by HPLC

Enopeptin A

Code No.: **BIA-E1555** Pack Sizes: **0.5 mg, 2.5 mg**

Enopeptin A is an unusual depsipeptide featuring a pentaenone side chain, reported as an antiviral by researchers at RIKEN in 1991. Enopeptin A has potent antibacterial activity against Gram positive and Gram negative bacteria, including MRSA. Enopeptin A is the most non-polar of the acyldepsipeptide (ADEP) antibiotics which include the recently rediscovered compounds, A54556 A and B, that act by activating and disregulating Clp-family proteins.

CAS Number: 139601-96-0 Molecular Formula: $C_{47}H_{57}N_7O_{11}$ Molecular Weight: 896.0

Source: Streptomyces sp. Purity: >95% by HPLC

Enterocin

Code No.: BIA-E1279 Pack Sizes: 1 mg, 5 mg

Enterocin is a potent antibiotic with broad spectrum activity against Gram positive and Gram negative bacteria. Although the mechanism of action of enterocin is unknown, it acts synergistically with streptomycin and chloramphenicol. The genetics of enterocin biosynthesis have been extensively investigated. Enterocin is a small molecular weight secondary metabolite and should not be confused with bacterial proteins isolated from Enterococci, generically referred to as "enterocins".

CAS Number: 59678-46-5
Molecular Formula: C₂₂H₂₀O₁₀
Molecular Weight: 444.4
Source: Strentomyce

Source: Streptomyces sp. Purity: >95% by HPLC

Epianhydrochlortetracycline hydrochloride

Code No.: BIA-E1346 Pack Sizes: 1 mg, 5 mg

Epianhydrochlortetracycline is a secondary degradation product formed by dehydration of epichlortetracycline at the C6 position to aromatise the B ring. Epianhydrochlortetracycline is an important standard for monitoring tetracycline stability.

CAS Number: 158018-53-2
Molecular Formula: C22H22Cl2N2O7

Molecular Weight: 497.3

Source: Semi-synthetic Purity: >95% by HPLC

Epianhydrotetracycline hydrochloride

Code No.: BIA-E1341 Pack Sizes: 1 mg, 5 mg

Epianhydrotetracycline is a secondary degradation product formed by epimerisation of tetracycline and dehydration at the C6 position to aromatise the B ring. Epianhydrotetracycline is an important standard for monitoring tetracycline stability. Although the degradation is associated with a loss of antibiotic activity, epianhydrotetracycline is considered biologically active and is thought responsible for aspects tetracycline toxicity.

CAS Number: 4465-65-0

Molecular Formula: C22H23CIN2O7

Molecular Weight: 462.9

Source: Semi-synthetic

Purity: >95% by HPLC

Epichlortetracycline hydrochloride

Code No.: BIA-E1345 Pack Sizes: 1 mg, 5 mg

Epichlortetracycline is a degradation product of chlorotetracycline formed by acid-catalysed isomerisation of the dimethylamino group at C4. Epichlortetracycline exhibits little antibiotic activity but its abundance is indicative of poor storage and handling of chlortetracycline.

 $\begin{array}{lll} \text{CAS Number:} & 101342\text{-}45\text{-}4 \\ \text{Molecular Formula:} & C_{22}H_{24}\text{Cl}_2N_2O_8 \\ \text{Molecular Weight:} & 515.4 \\ \end{array}$

Source: Semi-synthetic
Purity: >95% by HPLC

Epicoccamide

Code No.: BIA-E1427 Pack Sizes: 1 mg, 5 mg

Epicoccamide is an ornate linear fatty acid with an acyl tetronic acid terminus and glycosidic alkyl terminus, originally isolated from Epicoccum purpurascens in 2003. Although not extensively profiled, epicoccamide is non-cytotoxic, unlike the weak activity shown by related analogues, epicoccamides B, C and D.

CAS Number: 606139-26-8 Molecular Formula: $C_{29}H_{51}NO_{9}$ Molecular Weight: 557.7 Source: Epicoccum sp. Purity: >98% by HPLC

Epiequisetin

Code No.: BIA-E1434 Pack Sizes: 1 mg, 5 mg

Epiequisetin is a minor isomer of equisetin, a potent inhibitor of HIV-integrase produced by a number of species of Fusarium. Chemically, equisetin equilibrates with epiequisetin. Although

found to have comparable phytotoxicity to equisetin, epiequisetin has not been extensively investigated.

CAS Number: 255377-45-8 Molecular Formula: $C_{22}H_{31}NO_4$ Molecular Weight: 373.5

Source: Fusarium equiseti
Purity: >98% by HPLC

Epioxytetracycline

Code No.: BIA-E1342 Pack Sizes: 1 mg, 5 mg

Epioxytetracycline is a degradation product of oxytetracycline formed by the epimerisation of the dimethylamino group at C4 in solution at neutral to acidic pH. The epimerisation is associated with a loss of antibiotic activity. Epioxytetracycline is an important standard for monitoring oxytetracycline stability.

CAS Number: 14206-58-7 Molecular Formula: $C_{22}H_{24}N_2O_9$ Molecular Weight: 460.4 Source: Semi-synthetic Purity: >95% by HPLC

Epitetracycline hydrochloride

Code No.: BIA-E1339 Pack Sizes: 1 mg, 5 mg

Epitetracycline is a degradation product of tetracycline formed by acid-catalysed isomerisation of the dimethylamino- group at C4. Epitetracycline exhibits little antibiotic activity.

CAS Number: 23313-80-6

Molecular Formula: C22H25ClN2O8

Molecular Weight: 480.9

Source: Semi-synthetic

Epothilone A

Purity:

Code No.: BIA-E1254 Pack Sizes: 0.1 mg, 0.5 mg

>95% by HPLC

Epothilone A is a microtubule inhibitor isolated from the myxobacteria, Sorangium cellulosum. Epothilone A acts by stabilising microtubule formation at the taxol binding site, and causes cell cycle arrest at the G2/M transition, leading to cytotoxicity. Epothilone A has been investigated in clinical trials as an antitumor agent.

CAS Number: 152044-53-6
Molecular Formula: C₂₆H₃₉NO₆S
Molecular Weight: 493.7

Source: Sorangium cellulosum
Purity: >98% by HPLC



Epothilone B

Code No.: BIA-E1255 Pack Sizes: 0.1 mg, 0.5 mg

Epothilone B is a microtubule inhibitor isolated from the myxobacteria, Sorangium cellulosum. Like epothilone A, epothilone B acts by stabilising microtubule formation at the taxol binding site, and causes cell cycle arrest at the G2/M transition, leading to cytotoxicity.

CAS Number: 152044-54-7 Molecular Formula: $C_{27}H_{41}NO_6S$ Molecular Weight: 507.7

Source: Sorangium cellulosum
Purity: >98% by HPLC

19,20-Epoxycytochalasin C

Code No.: BIA-E1171 Pack Sizes: 1 mg, 5 mg

19,20-Epoxycytochalasin C is a major component of the cytochalasin complex. Although reported in the literature, there is no available biological data on the metabolite other than in-house data suggesting the presence of the epoxide renders the metabolite more active than cytochalasin C in inhibition of tumor cell growth in vitro.

CAS Number: 189351-79-9 Molecular Formula: $C_{30}H_{37}NO_{7}$ Molecular Weight: 523.6

Source: *Geniculosporium* sp. Purity: >99% by HPLC

19,20-Epoxycytochalasin D

Code No.: BIA-E1172 Pack Sizes: 1 mg, 5 mg

19,20-Epoxycytochalasin D is a major component of the cytochalasin complex. Although reported in the literature, there is no available biological data on the metabolite other than in-house data suggesting the presence of the epoxide renders the metabolite more active than cytochalasin D in inhibition of tumor cell growth in vitro.

CAS Number: 191349-10-7 Molecular Formula: $C_{30}H_{37}NO_{7}$ Molecular Weight: 523.6

Source: *Geniculosporium* sp. Purity: >99% by HPLC

Eprinomectin

Code No.: BIA-E1300 Pack Sizes: 5 mg, 25 mg

Eprinomectin is a mixture of eprinomectins B1a and B1b in a 9:1 ratio, produced from a mixture of avermectin B1a and B1b. Eprinomectin is used commercially as a topical endectocide (insecticide, miticide and nematocide) for cattle, including lactating dairy cows. Like all avermectins and milbemycins, eprinomectin acts by binding to parasite glutamate-gated chloride ion channels and disrupts neurotransmission leading to paralysis and death of the parasite, mite or insect.

CAS Number: 123997-26-2 Molecular Formula: $C_{50}H_{75}NO_{14}$ (for B1a)

Molecular Weight: 914.1

Source: Semi-synthetic Purity: >95% by HPLC

Eprinomectin B1a

Code No.: BIA-E1547 Pack Sizes: 1 mg, 5 mg

Eprinomectin B1a is a semi-synthetic analogue of avermectin B1a prepared by oxidation of the 4"-hydroxy moiety and reductive amination followed by acetylation. Eprinomectin B1a is the major component (>90%) of the commercial product for endo- and exoparasite control, eprinomectin. Members of the avermectin/milbemycin class exert their anthelmintic effects by binding to glutamate-gated chloride channels expressed on nematode neurones and pharyngeal muscle cells. The avermectins and milbemycins are also potent insecticides and acaricides.

CAS Number: 133305-88-1 Molecular Formula: $C_{50}H_{75}NO_{14}$ Molecular Weight: 914.1 Source: Semi-synthetic Purity: >99% by HPLC

Eprinomectin B1b

Code No.: BIA-E1548 Pack Sizes: 0.5 mg, 2.5 mg



Eprinomectin B1b is a semi-synthetic analogue of avermectin B1b prepared by oxidation of the 4"-hydroxy moiety and reductive amination followed by acetylation. Eprinomectin B1b is the minor component (<10%) of the commercial product for endo- and exoparasite control, eprinomectin. Members of the avermectin/milbemycin class exert their anthelmintic effects by binding to glutamate-gated chloride channels expressed on nematode neurones and pharyngeal muscle cells. The avermectins and milbemycins are also potent insecticides and acaricides.

 $\begin{array}{lll} \text{CAS Number:} & 133305\text{-}89\text{-}2 \\ \text{Molecular Formula:} & C_{49}H_{73}NO_{14} \\ \text{Molecular Weight:} & 900.1 \end{array}$

Source: Semi-synthetic Purity: >99% by HPLC

Equisetin

Code No.: BIA-E1029 Pack Sizes: 1 mg, 5 mg

The tetramic acid, equisetin, is produced by a number of species of Fusarium. Interest in equisetin emerged with reports of its inhibitory activity against HIV-1 integrase in vitro that was mechanistically distinct from previously described inhibitors. Equisetin inhibits 3' end-processing and strand transfer, as well as disintegration catalysed by either the full-length enzyme or the truncated integrase core.

CAS Number: 57749-43-6 Molecular Formula: $C_{22}H_{31}NO_4$ Molecular Weight: 373.5

Source: Fusarium equiseti
Purity: >99% by HPLC

Erythromycin A

Code No.: BIA-E1311 Pack Sizes: 5 mg, 25 mg

Erythromycin A is a 14-membered macrocyclic lactone with broad spectrum antibiotic activity, isolated from Saccharopolyspora erythraea (formerly Streptomyces erythreus) in 1952. Erythromycin is one of only a handful of microbial metabolites to have profoundly shaped the treatment of bacterial disease in the last 50 years. Erythromycin has given rise to new generations of semi-synthetic derivatives with improved stability and potency. Our product has been HPLC-purified to remove contaminants and degradation products.

CAS Number: 114-07-8 Molecular Formula: $C_{37}H_{67}NO_{13}$ Molecular Weight: 733.9

Source: Saccharopolyspora erythraea

Purity: >98% by HPLC

Erythromycin A enol ether

Code No.: BIA-E1347 Pack Sizes: 1 mg, 5 mg

Erythromycin A enol ether is a degradation product of erythromycin formed under acidic conditions by C6–OH internal attack on the C9 ketone to produce a cyclic enol ether. The rearrangement results in a loss of antibiotic activity. This single reaction was the prime driver for the development of second and third generation erythromycins. Erythromycin A enol ether is an important standard for stability studies.

CAS Number: 33396-29-1 Molecular Formula: $C_{37}H_{65}NO_{12}$ Molecular Weight: 715.9 Source: Semi-synthetic Purity: >98% by HPLC

Erythromycin A N-oxide

Code No.: BIA-E1539 Pack Sizes: 5 mg, 25 mg

Erythromycin A N-oxide is a minor analogue of the erythromycin complex isolated from Saccharopolyspora erythraea. The N-oxide is a facile metabolite formed in vivo which can revert to erythromycin A under reducing conditions. Despite its synthetic preparation in the 1950s, the biological activity of erythromycin A N-oxide has not been extensively studied.

CAS Number: 992-65-4 Molecular Formula: $C_{37}H_{67}NO_{14}$ Molecular Weight: 749.9

Source: Semi-synthetic Purity: >98% by HPLC

Erythromycin A oxime

Code No.: BIA-E1381 Pack Sizes: 5 mg, 25 mg

Erythromycin A 9-oxime is a semi-synthetic analogue of erythromycin prepared as means of overcoming acid lability and



improving oral absorption of erythromycin A while retaining comparable antibacterial potency. Although not developed as a commercial product, erythromycin oxime was pivotal in the development of the ring expanded aza-erythromycins (e.g. azithromycin) and the oxime ethers (e.g. roxithromycin).

CAS Number: 111321-02-9 Molecular Formula: $C_{37}H_{68}NO_{14}$ Molecular Weight: 749.0

Source: Semi-synthetic Purity: >98% by HPLC

Erythromycin B

Code No.: BIA-E1350 Pack Sizes: 1 mg, 5 mg

Erythromycin B (12-deoxyerythromycin A) is a minor cometabolite of erythromycin produced Saccharopolyspora erythreae. Erythromycin B exhibits broad spectrum antibiotic activity, albeit less potent than erythromycin A. Erythromycin B played an integral part of the SAR studies of semi-synthetic erythromycins, however none reached clinical development.

CAS Number: 527-75-3 Molecular Formula: $C_{37}H_{67}NO_{12}$ Molecular Weight: 717.9

Source: Saccharopolyspora erythraea

Purity: >98% by HPLC

Erythromycin C

Code No.: BIA-E1351 Pack Sizes: 1 mg, 5 mg

Erythromycin C (3"-O-demethylerythromycin A) is a minor cometabolite of erythromycin produced by Saccharopolyspora erythreae. Erythromycin C exhibits a narrower spectrum of antibiotic activity and is much less active than erythromycins A and R

CAS Number: 1675-02-1 Molecular Formula: $C_{36}H_{65}NO_{13}$ Molecular Weight: 719.9

Source: Saccharopolyspora erythraea

Purity: >98% by HPLC

Erythromycylamine

Code No.: BIA-E1517 Pack Sizes: 1 mg, 5 mg

Erythromycylamine is a semi-synthetic analogue of erythromycin prepared by reduction of erythromycin oxime. Erythromycylamine is a potent antibiotic, however the introduction of the aminomoiety increases the compound's polarity and is disadvantageous for in vivo use. This limitation was overcome by the synthesis of dirithromycin, a Schiff base pro-drug that dissociates in vivo to erythromycylamine.

CAS Number: 26116-56-3
Molecular Formula: C₃₇H₇₀N₂O₁₂
Molecular Weight: 735.0
Source: Semi-synthetic
Purity: >98% by HPLC

3'-Ethoxy-5,6-dihydrospinosyn J pseudoaglycone

Code No.: BIA-E1597 Pack Sizes: 1 mg, 5 mg

3'-Ethoxy-5,6-dihydrospinosyn J pseudoaglycone is an acid degradation product produced by selective hydrolysis of the more labile forosamine saccharide in the 17-position of 3'-ethoxy-5,6-dihydrospinosyn J, the major component of the commercial product, Spinetoram. 3'-Ethoxy-5,6-dihydrospinosyn J pseudoaglycone is only weakly active as an insecticide as the forosamine moiety is considered essential for potent activity. Despite the importance of spinosyns as agro-chemical insecticides, there are few published reports of the biological activity or the levels of 3'-ethoxy-5,6-dihydrospinosyn J pseudoaglycone in the environment.

CAS Number: 187166-40-1 Molecular Formula: $C_{34}H_{54}O_{9}$ Molecular Weight: 606.8 Source: Semi-synthetic Purity: >95% by HPLC

3'-Ethoxy-5,6-dihydrospinosyn J pseudoaglycone

Code No.: BIA-E1597 Pack Sizes: 1 mg, 5 mg

3'-Ethoxy-5,6-dihydrospinosyn J pseudoaglycone is an acid degradation product produced by selective hydrolysis of the more labile forosamine saccharide in the 17-position of 3'-ethoxy-5,6-



dihydrospinosyn J, the major component of the commercial product, Spinetoram. 3'-Ethoxy-5,6-dihydrospinosyn J pseudoaglycone is only weakly active as an insecticide as the forosamine moiety is considered essential for potent activity. Despite the importance of spinosyns as agro-chemical insecticides, there are few published reports of the biological activity or the levels of 3'-ethoxy-5,6-dihydrospinosyn J pseudoaglycone in the environment.

CAS Number: 187166-40-1 Molecular Formula: $C_{34}H_{54}O_{9}$ Molecular Weight: 606.8

Source: Semi-synthetic Purity: >95% by HPLC

3'-Ethoxyspinosyn L 17pseudoaglycone

Code No.: BIA-E1598 Pack Sizes: 0.5 mg, 2.5 mg

3'-Ethoxyspinosyn L 17-pseudoaglycone is an acid degradation product produced by selective hydrolysis of the more labile forosamine saccharide in the 17-position of 3'-ethoxy-5,6-dihydrospinosyn J, the minor component of the commercial product, Spinetoram. 3'-Ethoxyspinosyn L 17-pseudoaglycone is only weakly active as an insecticide as the forosamine moiety is considered essential for potent activity. Despite the importance of spinosyns as agro-chemical insecticides, there are few published reports of the biological activity or the levels of 3'-ethoxyspinosyn L 17-pseudoaglycone in the environment.

CAS Number: -

Molecular Formula: $C_{35}H_{54}O_9$ Molecular Weight: 618.8

Source: Semi-synthetic Purity: >95% by HPLC

3'-Ethoxyspinosyn L

Code No.: BIA-E1586 Pack Sizes: 1 mg, 5 mg

3'-Ethoxyspinosyn L is the minor component in the second generation spinosyn family of bio-insecticides marketed as Spinetoram. 3'-Ethoxyspinosyn L is a semi-synthetic compound prepared by selective ethylation and hydrogenation of Spinosyn L, itself a fermentation product from a biosynthetically blocked mutant of Saccharopolyspora spinosa. As an insecticide, 3'-ethoxyspinosyn L is considered more potent and to have earlier onset and longer duration of action than combinations of spinosyn A and D.

CAS Number: 187166-15-0 Molecular Formula: $C_{43}H_{69}NO_{10}$ Molecular Weight: 760.0

Source: Semi-synthetic
Purity: >95% by HPLC

Ethyl orsellinate



Code No.: BIA-E1660 Pack Sizes: 5 mg, 25 mg

Ethyl orsellinate, the ethyl ester of orsellinic acid, is a common lichen metabolite found in several lichen species, notably the commercial product, oakmoss, used in the perfume industry. Ethyl orsellinate has a broad range range of activities, including antibacterial, radical scavenger, in vitro antitumor and glycation inhibition. Ethyl orsellinate is a useful standard for bioassay and analytical techniques for dereplication of common co-metabolites.

CAS Number: 2524-37-0 Molecular Formula: $C_{10}H_{12}O_4$ Molecular Weight: 196.2 Source: Synthetic Purity: >95% by HPLC

Eupenifeldin



Code No.: BIA-E1674 Pack Sizes: 0.1 mg, 0.5 mg

Eupenifeldin is a bistropolone metabolite isolated from Eupenicillium brefeldianum by researchers at Bristol-Myers Squibb in 1993 as an antitumor agent. Its structure was solved by crystallography to reveal a central 11-membered macrocycle flanked by two dihydropyrans coupled to tropolones. More recently, eupenifeldin was isolated from a strain of Phoma in good yields. Eupenifeldin is a very potent antitumor agent with activity at the nanogram level in in vitro tumor cell lines and has weak nematocidal activity against the free living stages of the sheep parasitic nematode, Haemonchus contortus.

CAS Number: 151803-45-1 Molecular Formula: $C_{33}H_{40}O_{7}$ Molecular Weight: 548.7 Source: Aspergillus sp. Purity: >95% by HPLC

Evernic acid



Code No.: BIA-E1676 Pack Sizes: 1 mg, 5 mg

Evernic acid is an orcinol depside found in Evernia species and is a major component of Evernia prunastri (oakmoss), an important lichen in the perfume industry. Like many lichen metabolites, evernic acid was isolated in the 19th century with its structure and synthesis resolved in the early part of the 20th century. Evernic acid is an important chemotaxonomic standard for lichens. Evernic acid has been examined in a wide range of bioassays and has a diverse pharmacology with over 100 Scifinder citations up to 2017.



CAS Number: 537-09-7

Molecular Formula: $C_{17}H_{16}O_{7}$ Molecular Weight: 332.3

Source: Evernic sp.

Purity: >95% by HPLC

Everolimus

Code No.: BIA-E1384 Pack Sizes: 1 mg, 5 mg

Everolimus is a semi-synthetic macrocyclic lactone prepared from rapamycin by selective alkylation of the 42-hydroxy group with a silyl-protected hydroxyethyl triflate moiety, followed by addition of an ethylhydroxy moiety to provide greater stability and bioavailability. Like all tacrolimus analogues, everolimus binds to receptor protein, FKBP12. The complex then binds to mTOR preventing it from interacting with target proteins.

CAS Number: 159351-69-6 Molecular Formula: $C_{53}H_{83}NO_{14}$ Molecular Weight: 958.2

Source: Streptomyces hygroscopicus

Purity: >95% by HPLC

Extracellular Death Factor

Code No.: BIA-E1377 Pack Sizes: 1 mg, 5 mg

Extracellular Death Factor (ECF) is the dramatic name given to an interesting linear pentapeptide produced by E. coli, first identified by Engelberg-Kulka and colleagues in 2007 and published in Science. ECF acts as a quorum sensing agent, regulating bacterial cell density by balancing the levels of toxin and antitoxin via mazEF-mediated cell death genes.

CAS Number: 960129-66-2 Molecular Formula: $C_{27}H_{36}N_{10}O_{10}$ Molecular Weight: 660.6 Source: Synthetic Purity: >95% by HPLC

Feglymycin

Code No.: BIA-F1420 Pack Sizes: 1 mg, 5 mg

Feglymycin is an amphoteric, 13-member, linear peptide featuring 3,5-dihydroxyphenylalanine and a terminal dicarboxylate amino acid, isolated from a Streptomyces in 1999. Feglymycin is a potent antiviral agent with antibacterial activity, including against MRSA. Feglymycin specifically inhibits the enzymes MurA and MurC and inhibits cell-to-cell transfer between HIV-infected T cells, uninfected CD4+ T cells, and the DC-SIGN-mediated viral transfer to CD4+ T cells.

CAS Number: 209335-49-9
Molecular Formula: C₉₅H₉₇N₁₃O₃₀
Molecular Weight: 1900.9
Source: Strentomyces

Source: Streptomyces sp. Purity: >95% by HPLC

Ferulic acid



Code No.: BIA-F1728 Pack Sizes: 5 mg, 25 mg

Ferulic acid, a common plant metabolite found in many grains, is biosynthetically formed by degradation of lignin and lignocellulose. Ferulic acid is a member of the phenylpropanoid class of lignin biosynthetic precursors. The biochemical and pharmacological activity of ferulic acid has > 20,000 SciFinder entries. The area is well reviewed by Guzman (2014) and Sharma (2011). Ferulic acid a useful standard for analytical and bioassay dereplication as a metabolite commonly encountered in microbial fermentations.

CAS Number: 1135-24-6 Molecular Formula: $C_{10}H_{10}O_4$ Molecular Weight: 194.2 Source: Synthetic Purity: >95% by HPLC

Fidaxomicin

Code No.: **BIA-F1356** Pack Sizes: **1 mg, 5 mg**

Fidaxomicin is a recently marketed antibiotic with a confusing history dating back to its original isolation in 1975. Fidaxomicin is the major analogue of a family of macrocyclic lactones, isolated independently by three different groups from cultures belonging to three different genera (Actinoplanes, Dactylosporangium and Micromonospora) known as lipiarmycin A3, tiacumicin B and clostomicin B1, respectively. Fidaxomicin is a narrow spectrum antibiotic with excellent activity against Gram positive bacteria, notably Clostridium difficile. Fidaxomicin acts in the gastrointestinal tract without undue disruption to gut microbial flora.

CAS Number: 873857-62-6 Molecular Formula: $C_{52}H_{74}Cl_2O_{18}$ Molecular Weight: 1058.0

Source: Dactylosporangium aurantiacum

Purity: >98% by HPLC

Filipin complex

Code No.: BIA-F1619 Pack Sizes: 5 mg, 25 mg

Filipin complex comprises a family of pentaene macrocyclic lactones first isolated from Streptomyces filipinensis and reported by researchers at Upjohn in 1955. Filipin complex consists of four analogues, with filipin III comprising the bulk (>70%) of the complex. Filipin complex is a potent broad spectrum antifungal agent that also exhibits antitumor and antiviral activities. Filipin complex acts by binding cell membrane sterols, disrupting membrane integrity.

CAS Number: 11078-21-0

Molecular Formula: C₃₅H₅₈O₁₁ (for Flipin III)

Molecular Weight: 654.8

Source: Streptomyces sp. Purity: >95% by HPLC

Filipin II

Code No.: BIA-F1615 Pack Sizes: 0.5 mg, 2.5 mg

Filipin II is a minor component of the filipin complex, a family of pentaene antifungal metabolites first isolated from Streptomyces filipinensis and reported by researchers at Upjohn in 1955. Structurally, filipin II lacks the hydroxy moiety on the pentyl side chain and is more hydrophobic, eluting later than filipin III on reverse phase HPLC. Filipin II is a potent broad spectrum antifungal agent that also exhibits antitumor and antiviral activities and acts by binding cell membrane sterols, disrupting membrane integrity.

CAS Number: 38620-77-8 Molecular Formula: $C_{35}H_{58}O_{10}$ Molecular Weight: 638.8

Source: Streptomyces sp. Purity: >95% by HPLC

Filipin III

Code No.: **BIA-F1616** Pack Sizes: **1 mg, 5 mg**

Filipin III is the major component of the filipin complex, a family of pentaene antifungal metabolites first isolated from Streptomyces filipinensis and reported by researchers at Upjohn in 1955. Filipin III is a potent broad spectrum antifungal agent that also exhibits antitumor and antiviral activities. Filipin III acts by binding cell membrane sterols, disrupting membrane integrity. This sterol

selectivity has led to the use of filipin III as a routine diagnostic probe for quantifying cholesterol in mammalian cells.

CAS Number: 480-49-9 Molecular Formula: $C_{35}H_{58}O_{11}$ Molecular Weight: 654.8

Source: Streptomyces sp. Purity: >95% by HPLC

Flambalactone



Code No.: **BIA-F1626** Pack Sizes: **1 mg, 5 mg**

Flambalactone is a degradation product of flambamycin and the avilamycin antibiotic complexes isolated from Streptomyces hygroscopicus by researchers at May & Baker in the 1970s. Degradation of the avilamycins by methanolic HCl affords flambalactone and related flambic acid esters. Flambalactone is used as an important standard for quantifying the residue levels of the avilamycin complex, marketed as SurmaxTM for animal health use.

CAS Number: 55729-17-4 Molecular Formula: $C_{21}H_{26}Cl_2O_{10}$ Molecular Weight: 509.3 Source: Semi-synthetic Purity: >95% by HPLC

Florfenicol

Code No.: BIA-F1487 Pack Sizes: 25 mg, 100 mg

Florfenicol is synthesised from thiamphenicol by replacing the 3-hydroxy group with fluorine, first synthesised at Schering in 1980. By replacing the hydroxy group, it was rationalised that chloramphenicol resistance via chloramphenicol acetyltransferase could be eliminated. Florfenicol is a broad spectrum antibiotic with good activity against Gram negative and anaerobic bacteria. Florfenicol acts by binding to the 23S sub-unit of the 50S ribosome, inhibiting protein synthesis. Florfenicol has been extensively studied with over 400 literature citations.

CAS Number: 73231-34-2 Molecular Formula: $C_{12}H_{14}Cl_2FNO_4S$ Molecular Weight: 358.2 Source: Synthetic Purity: >99% by HPLC

Florfenicol amine

Code No.: BIA-F1488 Pack Sizes: 5 mg, 25 mg

Florfenicol amine is the 4-methylsulphonophenylpropylamine parent compound formed by hydrolysing the dichloroacetamide of florfenicol. Florfenicol amine is a metabolite and degradation



product of florfenicol. Florfenicol amine has no antibiotic activity but is an important standard for monitoring animal and environmental residues of florfenicol.

CAS Number: 76639-93-5 Molecular Formula: $C_{10}H_{14}FNO_3S$ Molecular Weight: 247.3 Source: Synthetic Purity: >99% by HPLC

Folipastatin



Code No.: BIA-F1699 Pack Sizes: 0.5 mg, 2.5 mg

HO CH₃

Folipastatin is a depsone metabolite first isolated from Aspergillus unguis by researchers at Sankyo, Japan in 1992 as an inhibitor of phospholipase A2. Folipastatin also possesses moderate antibiotic activity against Gram positive bacteria. It is a component of a mixture of unguinol-related metabolites produced by A. unguis and A. nidulins patented as growth promotants in livestock. Folipastatin is an inhibitor of sterol O-acyltransferase (SOAT) 1 and 2 isoenzymes in cell-based and enzyme assays.

CAS Number: 139959-71-0 Molecular Formula: $C_{23}H_{24}O_5$ Molecular Weight: 380.4

Source: Aspergillus unguis
Purity: >95% by HPLC

Fostriecin

Code No.: BIA-F1030 Pack Sizes: 0.1 mg, 0.5 mg

OH OH OH OH

Fostriecin is the most fully characterised member of a family of phosphate esters of a triene antibiotic. The antitumor potential of fostriecin has attracted considerable interest, focused on its mode of action as a topoisomerase II inhibitor. Subsequent research has focused on this metabolite's selective inhibition of protein phosphatase PP2A.

CAS Number: 87810-56-8 Molecular Formula: $C_{19}H_{26}NaO_{9}P$ Molecular Weight: 452.4

Source: Streptomyces sp.
Purity: >95% by HPLC

Frequentin



Code No.: BIA-F1702 Pack Sizes: 0.5 mg, 2.5 mg

OH OH

Frequentin is a polar neutral metabolite isolated from P. frequentans by Curtis and co-workers at ICI in 1951. Frequentin is

a cyclitol-like metabolite bearing a heptadiene chain. Frequentin, the aldehyde analogue of palitantin, exists as the hydroxymethylene in solution. Frequentin has been found in a number of Penicillium species and is a useful metabolite for chemotaxonomy of the genus. Frequentin is a potent antifungal active with minimal toxicity to mammalian cells.

CAS Number: 29119-03-7 Molecular Formula: $C_{14}H_{20}O_{4}$ Molecular Weight: 252.3 Source: Penicillium sp.

Source: *Penicillium* sp. Purity: >95% by HPLC

Fulvic acid



Code No.: BIA-F1625 Pack Sizes: 1 mg, 5 mg

HO O O

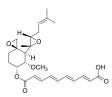
Fulvic acid is a fungal metabolite isolated from three Penicillium species by Raistrick and co-workers in 1935. Identification was based on the highly characteristic green complex formed with ferric ions. Fulvic acid is related to the siderophores, citromycetin and other 2,3-dihydrobenzoates. The literature of fulvic acid is frequently confused with a humic acid component bearing the same name. The biological activity of this fungal metabolite is not extensively characterised but its affinity to ferric ions suggests it complexes metal ions.

CAS Number: 479-66-3 Molecular Formula: $C_{14}H_{12}O_8$ Molecular Weight: 308.2

Source: Cercospora piaropi
Purity: >95% by HPLC

Fumagillin

Code No.: BIA-F1256 Pack Sizes: 0.5 mg, 2.5 mg



Fumagillin is a polyene mycotoxin isolated from Aspergillus fumigatus in 1951 as a potent antiprotozoan for the treatment of amoebiasis. More recently, fumagillin has been shown to inhibit endothelial cell proliferation and angiogenesis by inhibiting methionine aminopeptidase-2 (MetAP-2).

CAS Number: 23110-15-8 Molecular Formula: $C_{26}H_{34}O_{7}$ Molecular Weight: 458.6

Source: Aspergillus fumigatus
Purity: >99% by HPLC

Fumarprotocetraric acid



Code No.: BIA-F1672 Pack Sizes: 0.5 mg, 2.5 mg



Fumarprotocetraric acid is a β-orcinol depsidone found in a broad range of lichen species, notably within the genera Usnea, Parmelia and Cladonia. Fumarprotocetraric acid is an important standard in the chemotaxonomy of lichens. Isolated reports of antibacterial acidity occur in the literature, however unlike other lichen acids, the pharmacology and use in other applications has received little attention.

CAS Number: 489-50-9 Molecular Formula: $C_{22}H_{16}O_{12}$ Molecular Weight: 472.4 Source: Cladonia sp. Purity: >95% by HPLC

Fumigatin methylether



Code No.: BIA-F1658 Pack Sizes: 5 mg, 25 mg

Fumigatin methylether (ubiquinone Q0) was first prepared as a semi-synthetic analogue of fumigatin by Anslow and Raistrick in 1938. Fumigatin methylether has since been isolated in the defensive secretions of several millipede species. Fumigatin methylether is an intermediate in the biosynthesis of Coenzyme Q and has demonstrated anti-feedant activity against aphids.

CAS Number: 605-94-7 Molecular Formula: $C_9H_{10}O_4$ Molecular Weight: 182.2

Source: *Unidentified fungus*Purity: >95% by HPLC

Fumiquinazoline D



Code No.: BIA-F1628 Pack Sizes: 1 mg, 5 mg



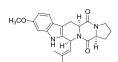
Fumiquinazoline D is member of the fumiquinazoline complex isolated from a marine strain of Aspergillus fumigatus by Numata and colleagues at Osaka University in 1995. Fumiquinazoline D has subsequently been reported as a useful chemotaxonomic marker for strains of A. fumigatus. The pharmacology of fumiquinazoline D has not been extensively reported but it is known to be weakly active against some tumor cell lines.

CAS Number: 140715-86-2 Molecular Formula: $C_{24}H_{21}N_5O_4$ Molecular Weight: 443.5

Source: Aspergillus fumigatus
Purity: >95% by HPLC

Fumitremorgin C

Code No.: BIA-F1031 Pack Sizes: 0.25 mg, 1 mg



Fumitremorgin C is a tremorgenic mycotoxin isolated from Aspergillus fumigatus. Recent research has recognised fumitremorgin C as a potent and specific inhibitor of the breast cancer resistance protein (BCRP/ABCG2) multidrug transporter. It reverses multidrug resistance mediated by BCRP and increases cytotoxicity of several anticancer agents in vitro.

CAS Number: 118974-02-0 Molecular Formula: $C_{22}H_{25}N_3O_3$ Molecular Weight: 379.5

Source: Aspergillus fumigatus
Purity: >95% by HPLC

Fumonisin B1

Code No.: **BIA-F1257** Pack Sizes: **0.5 mg, 2.5 mg**

Fumonisin B1 is a major analogue of a family of potent mycotoxins produced by various Fusarium species, associated with animal toxicity. In vitro, fumonisin B1 inhibits sphingosine N-acyltransferase (ceramide synthase) and blocks the growth of axons.

CAS Number: 116355-83-0
Molecular Formula: C₃₄H₅₉NO₁₅
Molecular Weight: 721.8

Source: Fusarium moniliforme
Purity: >99% by HPLC

Fumonisin B2

Code No.: BIA-F1258 Pack Sizes: 0.5 mg, 2.5 mg

Fumonisin B2 is a minor analogue of a family of potent mycotoxins produced by various Fusarium species, associated with animal toxicity worldwide. To date much of the research on the pharmacology of the fumonisins has focused on fumonisin B1. It is generally accepted that fumonisin B2 acts on ceramide biosynthesis, however, the pharmacology of the minor analogues is less well explored.

CAS Number: 116355-84-1 Molecular Formula: $C_{34}H_{59}NO_{14}$ Molecular Weight: 705.8

Source: Fusarium moniliforme
Purity: >98% by HPLC

Funalenone



Code No.: BIA-F1666 Pack Sizes: 0.5 mg, 2.5 mg



Funalenone is phenalenone isolated as a novel inhibitor of collagenase from Aspergillus niger by Omura and co-workers at the Kitasato Institute, Japan in 1999. Funalenone was reported to be devoid of antimicrobial activity (Gram positive and Gram negative, yeast and fungi). However, funalenone was also reported to inhibit bacterial cell wall synthesis enzymes, MraY and MurG. Funalenone has been identified as a potent inhibitor of HIV-1 integrase, showing 50-fold selectivity over mammalian cell toxicity.

CAS Number: 259728-61-5 Molecular Formula: $C_{15}H_{12}O_6$ Molecular Weight: 288.3 Source: Asperaillus sp

Source: Aspergillus sp. Purity: >95% by HPLC

Fusapyrone

Code No.: BIA-F1436 Pack Sizes: 1 mg, 5 mg

Fusapyrone is a broad spectrum antifungal metabolite isolated from several Fusarium species, first reported in 1994. Fusapyrone exhibits low zoo-toxicity as evidenced by a lack of toxicity against Artemia salina, and is a useful candidate for control of postharvest crop diseases. The mechanism of action of fusapyrone is unknown. The structure of fusapyrone was revised in 2006.

CAS Number: 156856-31-4 Molecular Formula: $C_{34}H_{54}O_{9}$ Molecular Weight: 606.8 Source: Fusarium sp. Purity: >98% by HPLC

Fusaric acid

NEW

Code No.: BIA-F1652 Pack Sizes: 5 mg, 25 mg

Fusaric acid was isolated as a phytotoxin from Fusarium heterosporium by Yabuta and colleagues in 1934. Fusaric acid is a picolinic acid derivative that displays a broad range of activity against Gram positive and Gram negative bacteria, fungi, yeast and mammalian tumor cell lines. Re-discovery of fusaric acid as a hypotensive agent, acting via potent inhibition of dopamine β -hydroxylase, has sustained interest in fusaric acid as an experimental reagent.

CAS Number: 536-69-6 Molecular Formula: $C_{10}H_{13}NO_2$ Molecular Weight: 179.2

Source: Fusarium oxysporum
Purity: >95% by HPLC

Fusarisetin A

Code No.: BIA-F1435 Pack Sizes: 0.5 mg, 2.5 mg



Fusarisetin is an unusual pentacyclic metabolite related to equisetin and isolated from a Fusarium. Fusarisetin was identified from a natural product screen using a three-dimensional matrigel-induced bioassay to study acinar morphogenesis. Fusarisetin is the first inhibitor of acini reported in the literature.

CAS Number: 1300041-53-5
Molecular Formula: C₂₂H₃₁NO₅
Molecular Weight: 389.5

Source: Fusarium equiseti
Purity: >98% by HPLC

Fusidate sodium

Code No.: BIA-F1259 Pack Sizes: 25 mg, 100 mg

Sodium fusidate is the more water soluble sodium salt of fusidic acid, a steroidal metabolite of Fusidum coccineum which is a potent Gram positive antibiotic. Fusidic acid inhibits protein synthesis in prokaryotes by inhibiting the ribosome-dependent activity of G factor and translocation of peptidyl-tRNA. Fusidic acid also suppresses NO lysis of pancreatic islet cells.

CAS Number: 751-94-0 Molecular Formula: C₃₁H₄₇NaO₆ Molecular Weight: 538.7

Source: Fusidium coccineum
Purity: >98% by HPLC

Galiellalactone

Code No.: BIA-G1032 Pack Sizes: 1 mg, 5 mg



Galiellalactone was originally isolated from Galiella rufa as a plant growth regulator. Recently galiellalactone was shown to inhibit IL-6 induced SEAP expression with IC50 values of 250-500 nM, blocking the binding of the activated Stat3 dimers to their DNA binding sites without inhibiting the tyrosine and serine phosphorylation of the Stat3 transcription factor.

CAS Number: 133613-71-5 Molecular Formula: $C_{11}H_{14}O_3$ Molecular Weight: 194.2

Source: Unidentified fungus
Purity: >95% by HPLC

Gamithromycin

Code No.: BIA-G1568 Pack Sizes: 5 mg, 25 mg



Gamithromycin is a semi-synthetic macrocyclic lactone belonging to the azalide class derived from erthyromycin, typified by azithromycin. The synthesis of gamithromycin involves a ring expansion using a Beckmann rearrangement to produce the 15-membered dibasic macrolide. Gamithromycin provides a broader spectrum of action, higher acid stability and improved bioavailability compared to older analogues of the erythromycin class and has been exclusively developed for animal health applications.

CAS Number: 145435-72-9 Molecular Formula: $C_{40}H_{76}N_2O_{12}$ Molecular Weight: 777.0

Source: Semi-synthetic Purity: >95% by HPLC

Geldanamycin

Code No.: BIA-G1101 Pack Sizes: 1 mg, 5 mg

Geldanamycin is a benzoquinone ansamycin antibiotic isolated from Streptomyces hygroscopicus. It is a potent antitumor metabolite that acts by binding to the 90-kDa heat-shock protein (Hsp90) essential to maintain the conformation, stability, activity and cellular localisation of several key oncogenic proteins such as ERBB2, C-RAF, CDK4, AKT/PKB, steroid hormone receptors, mutant p53, HIF-1a, survivin and telomerase hTERT.

CAS Number: 30562-34-6 Molecular Formula: $C_{29}H_{40}N_2O_9$ Molecular Weight: 560.6

Source: Streptomyces hygroscopicus

Purity: >99% by HPLC

Geninthiocin

Code No.: BIA-G1033 Pack Sizes: 0.5 mg, 2.5 mg

Geninthiocin, a thiopeptide antibiotic isolated from a Streptomyces sp., is a potent activator of the tipA gene, a bacterial transcription regulator involved in multidrug resistance. Geninthiocin displays a 10-fold selectivity for bacteria over mammalian cells lines, whereas the related dedialanyl geninthiocin shows the reverse selectivity. Geninthiocin is closely related to siomycin, a recently discovered inhibitor of oncogenic transcription factor, FoxM1.

CAS Number: 158792-27-9 Molecular Formula: $C_{50}H_{49}N_{15}O_{15}S$ Molecular Weight: 1132.1

Source: Streptomyces sp. Purity: >95% by HPLC

Genistein



Code No.: BIA-G1722 Pack Sizes: 5 mg, 25 mg

Genistein is an isoflavone found widely in legumes and other plant species. It is common in many microbial fermentations containing soy or other related plant-based extracts. Genistein has been very widely reported as an antibacterial, insect antifeedant and antitumor active. It also has oestrogenic, bond protective, antioxidant, and reverse transcriptase and tyrosine kinase inhibitory activity. More recently, genistein as a major component of soy products has gained acceptance as a nutraceutical. Genistein is an essential dereplication and bioassay standard in microbial natural product discovery.

CAS Number: 446-72-0 Molecular Formula: $C_{15}H_{10}O_{5}$ Molecular Weight: 270.2 Source: Glycine sp. Purity: >95% by HPLC

Gentamicin C2b

Code No.: BIA-G1563 Pack Sizes: 5 mg, 25 mg

Gentamicin C2b (micronomicin) is a trisaccharide pentaaminoglycoside antibiotic belonging to the gentamicin class. Gentamicin C2b was isolated from Micromonospora sagamiensis var. nonreductans by researchers at Kyowa Hakko Kogyo in 1974. Gentamicin C2b has broad activity against Gram positive and Gram negative bacteria. More recently, gentamicin C2b has been shown to induce neuromuscular blockage.

CAS Number: 52093-21-7 Molecular Formula: $C_{20}H_{41}N_5O_7$ Molecular Weight: 463.6

Source: Micromonospora sagamiensis var.

nonreductans
Purity: >95% by HPLC

Germicidin A

Code No.: BIA-G1282 Pack Sizes: 1 mg, 5 mg

Germicidin A is a pyranone isolated from Streptomyces sp. in 1993. Germicidin A is an extremely potent autoregulator of the sporulation of the producing strain and spores of closely related species. Inhibition is detected at 0.1 ng/ml and is orders of magnitude more potent than a diverse range of antibiotics.

CAS Number: 151271-57-7 Molecular Formula: $C_{11}H_{16}O_3$ Molecular Weight: 196.2

Source: Streptomyces sp. Purity: >95% by HPLC



Germicidin B

Code No.: BIA-G1283 Pack Sizes: 1 mg, 5 mg

OH OH

Germicidin B is a pyranone isolated from Streptomyces sp. Germicidin B is a potent autoregulator of the sporulation of the producing strain and spores of closely related species. Inhibition is detected at 0.1 ng/ml and is orders of magnitude more potent than a diverse range of antibiotics.

CAS Number: 150973-78-7 Molecular Formula: $C_{10}H_{14}O_3$ Molecular Weight: 182.2

Source: Streptomyces sp. Purity: >95% by HPLC

Gilvocarcin M

Code No.: BIA-G1034 Pack Sizes: 0.5 mg, 2.5 mg

Gilvocarcin M is the minor analogue of a complex of C-glycoside antitumor actives isolated from a Streptomyces sp. Gilvocarcin M contains a methyl group in the 8-position, and is less active than the vinyl analogue (gilvocarcin V), which is thought to act as an inhibitor of human topoisomerase II. Gilvocarcin M displays potent antibacterial, antifungal, antiviral and antitumor activity. Recent research suggests that the gilvocarcins act as photoactivated cross-linkers of DNA to histones.

CAS Number: 77879-89-1 Molecular Formula: $C_{26}H_{26}O_9$ Molecular Weight: 482.5

Source: Streptomyces sp. Purity: >95% by HPLC

Gilvocarcin V

Code No.: **BIA-G1035** Pack Sizes: **0.5 mg, 2.5 mg**

Gilvocarcin V is the major analogue of a complex of C-glycoside antitumor actives isolated from a Streptomyces sp. Gilvocarcin V contains a vinyl group in the 8-position, and is the most potent analogue of the complex. It is thought to act as an inhibitor of the catalytic activity of human topoisomerase II. The metabolite displays potent antibacterial, antifungal, antiviral and antitumor activity. Recent research suggests that the gilvocarcins act as photoactivated cross-linkers of DNA to histones.

 $\begin{array}{lll} \text{CAS Number:} & 77879 \hbox{-} 90 \hbox{-} 4 \\ \text{Molecular Formula:} & C_{27} H_{26} O_9 \\ \text{Molecular Weight:} & 494.5 \end{array}$

Source: Streptomyces sp. Purity: >95% by HPLC

Gliorosein



Code No.: BIA-G1680 Pack Sizes: 1 mg, 5 mg

Gliorosein is an unusual dihyrobenzoquinone isolated from a strain of Gliocladium roseum reported by researchers at ICI, England in 1951. The structure of gliorosein was resolved by Vischer two years later as a then unique "hemiquinone". The stereochemistry was resolved by Groves in 1966. Treatment of gliorosein by acid or base with heat converts gliorosein to its co-metabolite, aurantiogliocladium. Gliorosein exhibits weak to moderate antibacterial and antifungal activity, however lack of availability has impaired a more detailed understanding of its pharmacology.

CAS Number: 4373-40-4 Molecular Formula: $C_{10}H_{14}O_4$ Molecular Weight: 198.2

Source: Gliocladium sp. Purity: >95% by HPLC

Gliotoxin

Code No.: BIA-G1260 Pack Sizes: 1 mg, 5 mg

Gliotoxin is a potent epithiodioxopiperazine mycotoxin produced by species of Gliocladium, Aspergillus and Penicillium. At the cellular level it inhibits a broad range of unrelated mechanisms, including inhibition of chymotrypsin-like activity of the 20S proteasome and Ca2+ release from mitochondria, activation of transcription factor NF-kB in response to a variety of stimuli in T and B cells, anti-inflammatory activity, and inhibition of farnesyltransferase and geranylgeranyltransferase. The mode of action appears to be via covalent interaction with proteins through mixed disulphide formation. Gliotoxin inhibits a number of thiol-requiring enzymes and has antioxidant and immunomodulatory activity.

CAS Number: 67-99-2Molecular Formula: $C_{13}H_{14}N_2O_4S_2$ Molecular Weight: 326.4Source: Semi-synthetic

Purity: >99% by HPLC

Gramicidin complex

Code No.: BIA-G1592 Pack Sizes: 1 mg, 5 mg

$$\begin{array}{c} \text{NH} \\ \text{O} \\ \text{NH} \\$$

Gramicidins are a family of linear pentadecapeptides isolated from Bacillus brevis by Dubos at the Rockefeller Institute in 1939. Gramicidin is a complex of six closely related analogues A1, A2, B1, B2, C1 and C2 where A1 and A2 are the dominant components. Gramidicins act by forming channels in cell membranes causing ion leakage. Gramicidin complex is an essential bioprobe for understanding the nature of the cell membranes.

CAS Number: 1405-97-6

Molecular Formula: C99H139N19O18 (for Gramicidin A1)

Molecular Weight: 1883.3

Source: Bacillus brevis
Purity: >95% by HPLC

Graphislactone A

Code No.: BIA-G1559 Pack Sizes: 1 mg, 5 mg

Graphislactone A is the major analogue of a family of phenolic benzopyranones isolated from a mycobiont of lichens of the genus Graphis, first reported by Japanese researchers at Kobe Pharmaceutical University in 1997. Graphislactone A protects against oxidative injury by dose-dependent free radical scavenging and antioxidant activity.

CAS Number: 52179-44-9 Molecular Formula: $C_{16}H_{14}O_6$ Molecular Weight: 302.3

Source: *Cephalosporium* sp. Purity: >95% by HPLC

Griseofulvin

Code No.: BIA-G1212 Pack Sizes: 25 mg, 100 mg

Griseofulvin is a spirobenzofuran produced by a number of Penicillium species, first isolated in the 1930s by Raistrick's group. Griseofulvin is a selective antifungal agent used to treat skin infections in animals and humans. Griseofulvin acts by binding to fungal tubulin and inhibiting the mitotic spindle. Griseofulvin's ability to bind to keratin is considered an important aspect of the metabolite's access to dermatophytic fungi. More recently, griseofulvin has become an important phenotypic marker in Penicillium taxonomy.

CAS Number: 126-07-8 Molecular Formula: $C_{17}H_{17}CIO_6$ Molecular Weight: 352.8

Source: *Penicillium* sp. Purity: >99% by HPLC

Hemipyocyanine

Code No.: BIA-H1520 Pack Sizes: 5 mg, 25 mg

Hemipyocyanine (1-hydroxyphenazine) is a simple phenazine metabolite produced by several species of Pseudomonas and

Streptomyces. Hemipyocyanine exhibits broad spectrum activity with weak antibacterial, antifungal and antiviral activity. In the search for novel actives, hemipyocyanine and related phenazines are important dereplication standards to eliminate leads due to high amounts of weakly potent actives. Hemipyocyanine plays an important role in the biocontrol of plant diseases by some Pseudomonas strains.

CAS Number: 528-71-2 Molecular Formula: $C_{12}H_8N_2O$ Molecular Weight: 196.2

Source: Pseudomonas aeruginosa

Purity: >98% by HPLC

Herbicidin A

Code No.: BIA-H1567 Pack Sizes: 1 mg, 5 mg

Herbicidin A is the major analogue of a family of adenosine nucleosides containing a complex tricyclic saccharide originally isolated from Streptomyces saganonensis, reported by researchers at Sankyo in 1976. Hebicidin A is a potent herbicide with selective activity against dicotyledonous plants. The mode of action and broader pharmacology of herbicidin A has received little attention due to its restricted availability.

CAS Number: 55353-31-6 Molecular Formula: $C_{23}H_{29}N_5O_{11}$ Molecular Weight: 551.5

Source: Streptomyces sp. Purity: >95% by HPLC

Herbimycin A

Code No.: BIA-H1036 Pack Sizes: 0.5 mg, 2.5 mg

Herbimycin A is the major analogue of a complex of benzoquinone ansamycin antibiotics isolated from a Streptomyces hygroscopicus. Herbimycin A inhibits the 90-kDa heat-shock protein (Hsp90) which provides essential chaperone support to various signal transduction molecules, including certain steroid hormone receptors and select kinases. Herbimycin also inhibits protein tyrosine kinase and angiogenesis.

CAS Number: 70563-58-5
Molecular Formula: C₃₀H₄₂N₂O₉
Molecular Weight: 574.7

Source: Streptomyces sp. Purity: >99% by HPLC

Herbimycin C

Code No.: BIA-H1144 Pack Sizes: 0.5 mg, 2.5 mg

Herbimycin C is a minor analogue of the herbimycin complex isolated from Streptomyces hygroscopicus. Herbimycin C possesses potent antitumor activity and converts Rous sarcoma virus-infected rat kidney cells into normal cells. Until now limited access has restricted a full investigation of the properties of herbimycin C. Research on related metabolites, herbimycin A and geldanamycin, has stimulated intensive interest in this class as selective antitumor agents and for prolonging the viability of tissue-cultured cells and organs.

CAS Number: 91700-92-4 Molecular Formula: C₂₉H₄₀N₂O₉ Molecular Weight: 560.6

Source: Streptomyces sp. Purity: >98% by HPLC

Heronamide C

Code No.: BIA-H1286 Pack Sizes: 1 mg, 5 mg

Heronamide C is an unusual polyene macrocyclic lactam containing two isolated tetraene and triene chromophores. Heronamide C induces a unique reversible vacuolisation of mammalian tumor cells by an as yet unidentified mechanism.

CAS Number: 1257083-94-5
Molecular Formula: C29H39NO3
Molecular Weight: 449.6

Source: Streptomyces sp. Purity: >95% by HPLC

Hexadecanoyl-L-homoserine lactone

Code No.: BIA-H1500 Pack Sizes: 5 mg, 25 mg

Hexadecanoyl-L-homoserine lactone is an active quorum sensing modulator first recognised in Sinorhizobium meliloti. Hexadecanoyl-L-homoserine lactone and other acylhomoserine lactones have been detected in hundreds of bacterial species and while the homologues vary between species and strains, the homoserine lactones are the major chemical modulators of within and between cell communication and regulation. The most significant variable defining the function of the homoserine lactone is the length of the acyl chain, with shorter chains displaying opposing actions to the longer chains.

CAS Number: 87206-01-7 Molecular Formula: C₂₀H₃₇NO₃ Molecular Weight: 339.5 Source: Synthetic Purity: >99% by HPLC

Hexanoyl-L-homoserine lactone

Code No.: BIA-H1495 Pack Sizes: 5 mg, 25 mg

Hexanoyl-L-homoserine lactone is an active quorum sensing modulator first recognised in Rhizobium leguminosarum. Hexanoyl-L-homoserine lactone and other acylhomoserine lactones have been detected in hundreds of bacterial species and, while the homologues vary between species and strains, the homoserine lactones are the major chemical modulators of within and between cell communication and regulation. The most significant variable defining the function of the homoserine lactone is the length of the acyl chain, with shorter chains displaying opposing actions to the longer chains.

CAS Number: 147852-83-3 Molecular Formula: $C_{10}H_{17}NO_3$ Molecular Weight: 199.3 Source: Synthetic Purity: >99% by HPLC

Hirsutide



Code No.: BIA-H1635 Pack Sizes: 1 mg, 5 mg

Hirsutide is a cyclic tetrapeptide isolated from an entomopathogenic fungus Hirsutella sp., recovered from an infected spider by Munro and Blunt in New Zealand in 2005. Hirsutide was inactive against a limited cohort of bacteria and fungi and had no mammalian toxicity. However, subsequent synthesis and testing against other tumor cell lines, Gram negative bacteria, nematodes and pathogenic fungi revealed hirsutide to possess a broad bioprofile.

CAS Number: 865368-30-5 Molecular Formula: $C_{34}H_{40}N_4O_4$ Molecular Weight: 568.7 Source: Aspergillus sp. Purity: >95% by HPLC

Hydroaurantiogliocladin



Code No.: **BIA-H1651** Pack Sizes: **0.5 mg, 2.5 mg**

Hydroaurantiogliocladin is a metabolite of Gliocladium roseum that was first isolated as the reduced hydroquinone of aurantiogliocladin. Hydroaurantiogliocladin is biosynthetically



related to gliorosein. There is no available information on the bioprofile of hydroaurantiogliocladin.

CAS Number: 776-33-0 Molecular Formula: $C_{10}H_{14}O_4$ Molecular Weight: 198.2

Source: Gliocladium sp.
Purity: >95% by HPLC

4-Hydroxy-6-methyl-2-pyrone



Code No.: BIA-H1736 Pack Sizes: 5 mg, 25 mg

4-Hydroxy-6-methyl-2-pyrone is a pyrone isolated from the fungus Hypoxylon investians in 2014. 4-Hydroxy-6-methyl-2-pyrone has not been extensively investigated for pharmacological activity but is a useful metabolite for analytical and bioassay dereplication of crude microbial extracts.

CAS Number: 675-10-5Molecular Formula: $C_6H_6O_3$ Molecular Weight: 126.1Source: Synthetic
Purity: >95% by HPLC

4-Hydroxyalternariol

Code No.: BIA-H1558 Pack Sizes: 1 mg, 5 mg

4-Hydroxyalternariol is the fully demethylated tetraphenol analogue of the benzopyranone graphislactones. Hydroxyalternariol was isolated as a major co-metabolite of a graphislactone A-producing fungus. Hydroxyalternariol has not previously been available for study and no bioactivity has been reported to date.

CAS Number: 959417-21-1 Molecular Formula: $C_{14}H_{10}O_6$ Molecular Weight: 274.2

Source: Unidentified fungus
Purity: >95% by HPLC

21-Hydroxyoligomycin A

Code No.: **BIA-O1062** Pack Sizes: **1 mg, 5 mg**

21-Hydroxyoligomycin A is a rare member of the oligomycin class isolated as a co-metabolite of nemadectin, hence its original naming as nemadectin omega. Only limited literature references to this metabolite are available. However, in-house testing suggests

that 21-hydroxyoligomycin has a more selective action against mammalian tumor cell lines than oligomycin A, exhibiting only weak antifungal and nematocidal activity.

CAS Number: 102042-09-1 Molecular Formula: $C_{45}H_{74}O_{12}$ Molecular Weight: 807.1

Source: Streptomyces sp. Purity: >95% by HPLC

14-a-Hydroxypaspalinine



Code No.: BIA-P1632 Pack Sizes: 1 mg, 5 mg

14-a-hydroxypaspalinine is an indolic secondary metabolite first isolated from Aspergillus nomius by researchers at Iowa University and the USDA in 1993. 14-a-hydroxypaspalinine is a member of the paspalinine family of tremorigenic toxins often associated with animal toxicity on pasture. 14-a-hydroxypaspalinine exhibits weak antiinsectan activity, however other aspects of the metabolite's bioprofile have not been extensively investigated.

CAS Number: 151341-77-4 Molecular Formula: $C_{27}H_{31}NO_5$ Molecular Weight: 449.5 Source: Aspergillus sp. Purity: >95% by HPLC

7-Hydroxypestalotin

Code No.: BIA-H1068 Pack Sizes: 0.5 mg, 2.5 mg

Hydroxypestalotin, a minor analogue of pestalotin, was isolated from Penicillium decumbens. Only the initial report of the metabolite's isolation is available. It is presumed to share a common activity profile with pestalotin.

CAS Number: 41164-59-4 Molecular Formula: $C_{11}H_{18}O_5$ Molecular Weight: 230.3

Source: *Penicillium decumbens*Purity: >99% by HPLC

Hygrolidin

Code No.: BIA-H1295 Pack Sizes: 1 mg, 5 mg

Hygrolidin is a 16-membered macrocyclic lactone closely related to the bafilomycins, active against Valsa ceratosperma, the pathogen of apple canker disease. Hygrolidin is active against SV40 tumor cells, and inhibits the growth of solid tumor-derived cell lines such as DLD-1 human colon cancer cells with increased cells in G1 and S phases. Hygrolidin decreases cyclin-dependent kinase (cdk) 4,



cyclin D and cyclin B, and increases cyclin E and p21 levels. Hygrolidin-induced p21 inhibits cyclin A-cdk2 complex more strongly than cyclin E-cdk2 complex. It also increases p21 mRNA in DLD-1 cells, but not in normal fibroblasts.

CAS Number: 83329-73-1 Molecular Formula: $C_{38}H_{58}O_{11}$ Molecular Weight: 690.9

Source: Streptomyces sp. Purity: >95% by HPLC

Hygromycin B

Code No.: BIA-H1562 Pack Sizes: 5 mg, 25 mg

Hygromycin B is a trisaccharide aminoglycoside with a terminal cyclitol produced by Streptomyces hygroscopicus, reported by researchers at Eli Lily in the early 1950s. Hygromycin B belongs to the destomycin family of aminoglycosides which contain a unique cyclic structure linking the terminal saccharide. Hygromycin B exhibits broad spectrum antibiotic and anthelmintic activity, and is used as a feed additive for swine and poultry. Hygromycin B inhibits polypeptide synthesis by binding peptidyl-tRNA and preventing translocation by Elongation Factor 2.

CAS Number: 31282-04-9 Molecular Formula: $C_{20}H_{37}N_3O_{13}$ Molecular Weight: 527.5

Source: Streptomyces hygroscopicus

Purity: >95% by HPLC

Ikarugamycin

Code No.: BIA-I1223 Pack Sizes: 0.5 mg, 2.5 mg

Ikarugamycin is an unusual pentacyclic tetramic acid produced by Streptomyces phaeochromogenes, with potent activity against the protozoan, Trichomonas vaginalis, reported in 1972. Ikarugamycin also demonstrates selective Gram positive antibacterial activity and anti-ulcer activity possibly via inhibition of H. pylori. In addition, ikarugamycin inhibits the uptake of oxidized low-density lipoprotein in mouse macrophages, blocks PMA and Nef-mediated cell surface CD4 down-regulation, and inhibits clathrin-coated pit-mediated endocytosis. Importantly, ikarugamycin is emerging as a useful agent for studying the process of endocytosis.

CAS Number: 36531-78-9 Molecular Formula: $C_{29}H_{38}N_2O_4$ Molecular Weight: 478.6

Source: Streptomyces sp. Purity: >99% by HPLC

Illudin M



Code No.: BIA-I1685 Pack Sizes: 1 mg, 5 mg

Illudin M is sesquiterpene isolated as the toxic principle from the basidiomycete, Clitocybe illudens (Omphalotus illudens, Jack O'lantern) by McMorris and Anchel, New York Botanical Gardens in 1965. The total synthesis of illudin M was completed by Kinder and Blair in 1994. Illudin M has potent and selective activity against mammalian tumor cells and its potential as an in vivo antitumor was intensively investigated. Illudin M acts as a bifunctional alkylating agent, reacting spontaneously with thiols, notably, glutathione or cysteine at or slightly below pH 7.

CAS Number: 1146-04-9 Molecular Formula: $C_{15}H_{20}O_3$ Molecular Weight: 248.3 Source: Unknown Purity: >95% by HPLC

Illudin S

Code No.: BIA-I1398 Pack Sizes: 1 mg, 5 mg

Illudin S is potent antitumor sesquiterpene, first isolated from the fungus, Clitocybe illudens, in 1963. Illudin S is metabolically activated to reactive intermediates that bind DNA. The DNA damage appears to differ from that of other reactive metabolites. Importantly, illudin S exhibits in vitro and in vivo potency against multi-drug resistant tumors.

CAS Number: 1149-99-1 Molecular Formula: $C_{15}H_{20}O_4$ Molecular Weight: 264.3

Source: Pleurotus lampas
Purity: >98% by HPLC

Indanomycin

Code No.: BIA-I1296 Pack Sizes: 1 mg, 5 mg

Indanomycin is an unusual pyrollic ionophore active against Gram positive bacteria and insects. Interestingly, indanomycin has antihypertensive properties. Indanomycin possesses affinity for both mono- and divalent ions, and has been reported as a growth promoter in ruminants.

 $\begin{array}{lll} \text{CAS Number:} & 66513\text{-}28\text{-}8 \\ \text{Molecular Formula:} & C_{31}H_{43}NO_4 \\ \text{Molecular Weight:} & 493.7 \\ \end{array}$

Source: Streptomyces sp. Purity: >95% by HPLC



Indolmycin

Code No.: BIA-I1040 Pack Sizes: 1 mg, 5 mg

Indolmycin is a highly selective antibiotic which acts as a tryptophan anti-metabolite. Recent research has shown that indolmycin is active against Mycobacteria and H. pylori and can stimulate transcription in Escherichia coli.

CAS Number: 21200-24-8 Molecular Formula: $C_{14}H_{15}N_3O_2$ Molecular Weight: 257.3

Source: Streptomyces sp.

Purity: >99% by HPLC (total diastereoisomers)

Integracin A

Code No.: BIA-I1280 Pack Sizes: 1 mg, 5 mg

Integracin A is an unusual ester of two structurally related alkylresorcinols first isolated from a fungus Cytonaema sp. in 2002 as a potent inhibitor of HIV-1 integrase. With the exception of this initial report, integracin A has received little further attention.

CAS Number: 224186-03-2 Molecular Formula: $C_{37}H_{56}O_8$ Molecular Weight: 628.8

Source: *Cytospora* sp. Purity: >95% by HPLC

Integracin B

Code No.: BIA-I1281 Pack Sizes: 1 mg, 5 mg

Integracin B is an unusual ester of two structurally related alkylresorcinols first isolated from a fungus, Cytonaema sp., in 2002 as a potent inhibitor of HIV-1 integrase. With the exception of this initial report, integracin B has received little further attention.

CAS Number: 224186-05-4 Molecular Formula: $C_{35}H_{54}O_{7}$ Molecular Weight: 586.8

Source: *Cytospora* sp. Purity: >95% by HPLC

Ionomycin

Code No.: BIA-I1261 Pack Sizes: 1 mg, 5 mg

Ionomycin was isolated from Streptomyces conglobatus as a potent Gram positive antibiotic. During isolation, it was recognised that ionomycin exhibits a very high affinity and selectivity for calcium ions, suggesting the metabolite acts as a calcium ionophore. More recently, ionomycin has been used in cell biology as a universal calcium ionophore to explore the role of calcium regulation in the cell.

CAS Number: 56092-81-0 Molecular Formula: $C_{41}H_{72}O_{9}$ Molecular Weight: 709.0

Source: Streptomyces conglobatus

Purity: >98% by HPLC

Isoapoptolidin

Code No.: BIA-I1041 Pack Sizes: 0.1 mg, 0.5 mg

Isoapoptolidin, originally isolated from a Nocardiopsis sp., is a ring-expanded isomer of apoptolidin. In water, apoptolidin and isoapoptolidin equilibrate in a ratio of $\sim\!1.5\!:\!1$ within hours. In a rapid F0F1-ATPase assay, isoapoptolidin was approximately half as potent as apoptolidin (IC50 17 μM vs. 0.7 μM).

 $\begin{array}{lll} \text{CAS Number:} & 476647\text{-}30\text{-}0 \\ \text{Molecular Formula:} & C_{58}H_{96}O_{21} \\ \text{Molecular Weight:} & 1129.4 \\ \end{array}$

Source: *Amycolatopsis* sp. Purity: >90% by HPLC

Isochlortetracycline



Code No.: BIA-I1656 Pack Sizes: 1 mg, 5 mg

Isochlortetracycline (isoaureomycin) is a base-catalysed degradation product of chlortetracycline. Isochlortetracycline is an important standard for the detection of chlortetracycline residues in animals and in the environment with over 100 entries in Scifinder up to 2016 listing its applications. Little is known of the bioactivity of isochlortetracyline.

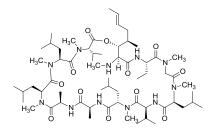


 $\begin{array}{lll} \text{CAS Number:} & 514\text{-}53\text{-}4 \\ \text{Molecular Formula:} & \text{C}_{22}\text{H}_{23}\text{CIN}_2\text{O}_8 \\ \text{Molecular Weight:} & 478.9 \\ \end{array}$

Source: Semi-synthetic Purity: >95% by HPLC

Isocyclosporin A

Code No.: BIA-I1262 Pack Sizes: 1 mg, 5 mg



Isocyclosporin A is a rearranged degradation product formed by acid treatment of cyclosporin A under aqueous and non-aqueous conditions. This rearrangement has been used as the basis of a HPLC fluorescence for quantifying cyclosporin A. The pharmacology of isocyclosporin A has received little attention.

CAS Number: 59865-16-6 Molecular Formula: $C_{62}H_{111}N_{11}O_{12}$ Molecular Weight: 1202.6 Source: Trichoderma sp. Purity: >98% by HPLC

Isoferulic acid

NEW

Code No.: BIA-I1729 Pack Sizes: 5 mg, 25 mg

Isoferulic acid, a common plant metabolite, found in many grains, is biosynthetically formed by degradation of lignin and lignocellulose. Isoferulic acid is a member of the phenylpropanoid class of lignin biosynthetic precursors. The biochemical and pharmacological activity of cinnamic acids is well reviewed by Guzman (2014) and Sharma (2011). Isoferulic acid is a useful standard for analytical and bioassay dereplication as a metabolite commonly encountered in microbial fermentations.

CAS Number: 537-73-5 Molecular Formula: $C_{10}H_{10}O_4$ Molecular Weight: 194.2 Source: Synthetic Purity: >95% by HPLC

Isokotanin B



Code No.: BIA-I1633 Pack Sizes: 0.5 mg, 2.5 mg

Isokotanin B is a biscoumarin isolated from Aspergillus alliaceus by researchers at Iowa University and the USDA in 1994. Isokotanin

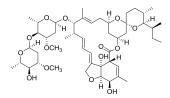
B is a highly characteristic chemotaxonomic marker for species belonging to the A. alliaceus and related clades. Other than weak insecticidal activity, the bioprofile of isokotanin has not been extensively investigated.

CAS Number: 154160-09-5 Molecular Formula: $C_{23}H_{20}O_8$ Molecular Weight: 424.4

Source: Aspergillus sp.
Purity: >95% by HPLC

Ivermectin B1a

Code No.: BIA-I1119 Pack Sizes: 5 mg, 25 mg



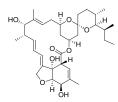
Ivermectin B1a (dihydroavermectin B1a) is the major component (>80%) of the commercial anthelmintic, ivermectin. Members of the avermectin/milbemycin anthelmintic class exert their anthelmintic effects by binding to glutamate-gated chloride channels expressed on nematode neurones and pharyngeal muscle cells. The avermectins and milbemycins are also potent insecticides. The individual 25-sec-butyl (B1a) and 25-iso-propyl (B1b) components of ivermectin have received little separate study.

CAS Number: 70161-11-4
Molecular Formula: C₄₈H₇₄O₁₄
Molecular Weight: 875.1

Source: Semi-synthetic Purity: >95% by HPLC

Ivermectin B1a aglycone

Code No.: BIA-I1151 Pack Sizes: 1 mg, 5 mg



Ivermectin aglycone is a semi-synthetic produced by hydrolysing the disaccharide unit of ivermectin. Ivermectin aglycone is a potent inhibitor of nematode larval development, but is devoid of paralytic activity. The aglycone is used as a sensitive probe for the detection of some types of ivermectin resistance.

CAS Number: 123997-59-1 Molecular Formula: $C_{34}H_{50}O_{8}$ Molecular Weight: 586.8

Source: Semi-synthetic Purity: >99% by HPLC



Ivermectin B1a monosaccharide

Pack Sizes: 1 mg, 5 mg Code No.: **BIA-I1150**

Ivermectin monosaccharide is a semi-synthetic produced by selective hydrolysis of the terminal saccharide unit of ivermectin. Ivermectin monosaccharide is a potent inhibitor of nematode larval development, but is devoid of paralytic activity. monosaccharide is used as a sensitive probe for the detection of some types of ivermectin resistance.

CAS Number: 123997-64-8 Molecular Formula: C41H62O11 730.9 Molecular Weight:

Source: Semi-synthetic Purity: >99% by HPLC

Δ²-Ivermectin B1a

Code No.: **BIA-I1581** Pack Sizes: 1 mg, 5 mg

 Δ^2 -Ivermectin B1a is an irreversible base degradation product of ivermectin found in animals treated with ivermectin and in the environment. Δ^2 -Ivermectin B1a is formed by rearrangement of the naturally occurring Δ^3 -group to the 2-position. Despite the importance of ivermectin as an anthelmintic in animal health, there are no published reports of the biological activity or the levels of Δ^2 -Ivermectin B1a in animals or in the environment.

CAS Number: 1135339-49-9 Molecular Formula: C₄₈H₇₄O₁₄ Molecular Weight: 875.1

Source: Semi-synthetic Purity: >95% by HPLC

epi-Ivermectin B1a

Code No.: BIA-I1578 Pack Sizes: 1 mg, 5 mg

epi-Ivermectin B1a is a base-catalysed intermediate in the decomposition of ivermectin. epi-Ivermectin B1a is formed by epimerisation at the 2-position which ultimately rearranges irreversibly to the isomeric alkene analogue, Δ^2 -ivermectin B1a. Despite the importance of ivermectin as an anthelmintic in animal health, there are no published reports of the biological activity or the levels of epi-ivermectin B1a in animals or the environment.

CAS Number:

Molecular Formula: C48H74O14 Molecular Weight: 875.1

Semi-synthetic Source: Purity: >95% by HPLC

Ivermectin B1b

Code No.: BIA-I1117 Pack Sizes: 0.5 mg, 2.5 mg

Ivermectin B1b (dihydroavermectin B1b) is the minor component (<20%) of the commercial anthelmintic, ivermectin. Members of the avermectin/milbemycin anthelmintic class exert their anthelmintic effects by binding to glutamate-gated chloride channels expressed on nematode neurones and pharyngeal muscle cells. The avermectin/milbemycins are also potent insecticides. In vitro, the B1b (25-iso-propyl) analogue is slightly more potent than the 25-sec-butyl (B1a) analogue as an inhibitor of nematode larval development and paralysis, and also a more sensitive probe for ivermectin resistance.

CAS Number: 70209-81-3 Molecular Formula: $C_{47}H_{72}O_{14}$ Molecular Weight: 861.1 Semi-synthetic Source: >95% by HPLC

JBIR-15

Purity:



Code No.: BIA-J1720 Pack Sizes: 0.25 mg, 1 mg

JBIR-15 is a non-proteogenic cyclic tripeptide isolated from a marine sponge-derived Aspergillus sclerotiorum by researchers at BIRC, Japan in 2009. JBIR-15 is N-demethylaspochracin, the macrocycle comprising alanine, N-methylvaline and an ornithine cyclised through the delta rather than the alpha-amino group. The alpha amino is acylated with an octa-2,4,6-trienoic acid. JBIR-15 is known to be non-toxic to mammalian cell lines and insects but its biological activity is largely unexplored.

CAS Number: 1198588-57-6 $C_{22}H_{34}N_4O_4$ Molecular Formula: Molecular Weight: 418.5 Aspergillus sp. Source: Purity: >95% by HPLC

Juglone



Code No.: BIA-J1739 Pack Sizes: 5 mg, 25 mg



Juglone (5-hydroxynaphthoquinone) is a pigment found in several plant species, notably in the genus, Juglans (walnuts and pecan nuts) and has been reported as a metabolite of the plant pathogenic fungus, Verticillium dahlia. Juglone exhibits allelopathic, antifungal, herbicidal and anti-tumor activities and has been shown to induce quinone reductase and glutathionone transferase. Juglone is a useful standard for analytical and bioassay dereplication of crude microbial extracts.

CAS Number: 481-39-0 Molecular Formula: $C_{10}H_6O_3$ Molecular Weight: 174.2

Source: *Penicillium* sp. Purity: >95% by HPLC

K252A

Code No.: BIA-K1225 Pack Sizes: 0.5 mg, 2.5 mg

K252A is a staurosporine analogue isolated from a Nocardiopsis strain as a potent inhibitor of protein kinase C. K252A exhibits potent antitumor activity but shows no antimicrobial activity in vitro, or in vivo toxicity in rodents. While K252A is a potent inhibitor of Ca2+/calmodulin kinase II, it is also active against other kinases, notably myosin light chain kinase, cAMP-dependent protein kinase (PKA), protein kinase C (PKC) and cGMP-dependent protein kinase (PKG).

CAS Number: 99533-80-9 Molecular Formula: $C_{27}H_{21}N_3O_4$ Molecular Weight: 467.5

Source: *Nocardiopsis* sp. Purity: >98% by HPLC

Kazusamycin A

Code No.: BIA-K1042 Pack Sizes: 0.1 mg, 0.5 mg

Kazusamycin A is a minor member of the leptomycin complex isolated from some Streptomyces species. It is an hydroxylated analogue of leptomycin B, a nuclear export inhibitor. Kazusamycin A exhibits potent antitumor activity both in vitro and in vivo against P388 and L1210 cell lines, and also shows strong antibacterial and antifungal activity.

CAS Number: 92090-94-3 Molecular Formula: $C_{33}H_{48}O_{7}$ Molecular Weight: 556.7

Source: Streptomyces sp. Purity: >95% by HPLC

Kazusamycin B

Code No.: **BIA-K1043** Pack Sizes: **0.1 mg, 0.5 mg**

Kazusamycin B is a minor component of the leptomycin complex produced by some Streptomyces sp. It is an hydroxylated analogue of leptomycin A, a nuclear export inhibitor. Kazusamycin B displays potent antitumor activity against L1210 and human colon adenocarcinoma, and in vivo activity against P388 lymphocytic leukemia in mice. Kazusamycin B also possesses strong antibacterial and antifungal activity.

CAS Number: 107140-30-7 Molecular Formula: $C_{32}H_{46}O_{7}$ Molecular Weight: 542.7

Source: Streptomyces sp. Purity: >95% by HPLC

Kendomycin

Code No.: BIA-K1143 Pack Sizes: 0.5 mg, 2.5 mg

Kendomycin is an unusual macrocyclic metabolite containing a rare quinone methide group. Kendomycin is a potent antibacterial agent against Gram positive and Gram negative bacteria, including MRSA strains, also displaying antitumor activity. Kendomycin is a potent endothelin receptor agonist and demonstrates antiosteoporotic activity.

CAS Number: 183202-73-5 Molecular Formula: C₂₉H₄₂O₆ Molecular Weight: 486.6

Source: Streptomyces sp. Purity: >95% by HPLC

Kibdelone A

Code No.: BIA-K1329 Pack Sizes: 1 mg, 5 mg

Kibdelone A is potent antitumor metabolite isolated from Kibdelosporangium sp. Structurally, kibdelone A is related to lysolipin and albofungin, however no comparative investigation of this class has been reported. The mode of action and pharmacology of the kibdelones has received little attention.

CAS Number: 934464-77-4 Molecular Formula: $C_{29}H_{24}CINO_{10}$ Molecular Weight: 582.0

Source: *Kibdelosporangium* sp. Purity: >95% by HPLC

Kibdelone B

Code No.: BIA-K1330 Pack Sizes: 0.5 mg, 2.5 mg

Kibdelone B is a minor analogue of a potent antitumor complex isolated from Kibdelosporangium sp. Structurally, kibdelone B is related to lysolipin and albofungin, however no comparative investigation of this class has been reported. The mode of action and pharmacology of the kibdelones has received little attention.

 $\begin{array}{lll} \text{CAS Number:} & 934464\text{-}78\text{-}5 \\ \text{Molecular Formula:} & C_{29}\text{H}_{26}\text{CINO}_{10} \\ \text{Molecular Weight:} & 584.0 \\ \end{array}$

Source: *Kibdelosporangium* sp. Purity: >95% by HPLC

Kibdelone C

Code No.: BIA-K1331 Pack Sizes: 1 mg, 5 mg

Kibdelone C is the major analogue of a potent antitumor complex isolated from Kibdelosporangium sp. Structurally, kibdelone C is related to lysolipin and albofungin, however no comparative investigation of this class has been reported. The mode of action and pharmacology of the kibdelones has received little attention.

CAS Number: 934464-79-6 Molecular Formula: $C_{29}H_{28}CINO_{10}$ Molecular Weight: 586.0

Source: *Kibdelosporangium* sp. Purity: >95% by HPLC

Kigamicin C

Code No.: BIA-K1116 Pack Sizes: 0.5 mg, 2.5 mg

Kigamicin C was discovered by an anti-austerity strategy, targeting cancer cells' tolerance to starvation. It selectively kills PANC-1 cells (a pancreatic cell line) at concentrations 100 times lower under nutrient starved conditions than in normal conditions. The mechanism of action is proposed to be via blockade of aPKB/Akt activation, caused by the withdrawal of nutrients. It is active in vivo against a human pancreatic cancer xenograft model. Kigamicin C also inhibits the growth of Gram positive bacteria including MRSA, but is not active against Gram negative bacteria.

CAS Number: 680571-51-1 Molecular Formula: $C_{41}H_{47}NO_{16}$ Molecular Weight: 809.8

Source: *Amycolatopsis* sp. Purity: >98% by HPLC

Kijanimicin

Code No.: BIA-K1153 Pack Sizes: 0.5 mg, 2.5 mg

Kijanimicin is a tetronic acid related to saccharocarcin, chlorothricin, versipelostatin and tetrocarcin. Like the tetrocarcins, kijanimicin contains an unusual nitroaminoglycoside. Kijanimicin is a potent antibacterial, antimalarial and antitumor active. Several members of this class have received considerable literature focus. Versipelostatin inhibits transcription from the promoter of GRP78, a gene that is activated as part of a stress signalling pathway under glucose deprivation resulting in unfolded protein response (UPR). The UPR-inhibitory action is seen only in conditions of glucose deprivation and causes selective and massive killing of the glucose-deprived cells. Tetrocarcin A appears to target the phosphatidylinositide-3'-kinase/Akt signalling pathway.

CAS Number: 78798-08-0 Molecular Formula: $C_{67}H_{100}N_2O_{24}$ Molecular Weight: 1317.5

Source: Actrinomadura sp. Purity: >99% by HPLC

Kojic acid



Code No.: BIA-K1696 Pack Sizes: 5 mg, 25 mg

Kojic acid is a polar pyranone metabolite found in high concentrations in many species of Aspergillus and other fungi. The history of kojic acid and its relationship to koji (Aspergillus oryzae fermentation) is well reviewed by Bentley (2006) who dates its discovery to 1907 with its structure being reported by Shibata in 1924. Kojic acid is a weak antibacterial and forms chelates with many metal ions. Kojic acid from an extract of Aspergillus albus was shown to be a tyrosinase inhibitor driving continued interest in this metabolite as a skin de-pigmentation agent. Kojic acid is an important metabolite in chemical and bioassay dereplication.

CAS Number: 501-30-4 Molecular Formula: $C_6H_6O_4$ Molecular Weight: 142.1

Source: Aspergillus sp.
Purity: >95% by HPLC



Kotanin A



Code No.: BIA-K1634 Pack Sizes: 0.5 mg, 2.5 mg



Kotanin A is a biscoumarin first isolated from Aspergillus glaucus by Buchi and co-workers at Massechussets Institute of Technology when identifying the toxic principles from mould-infested rice in Thailand in 1971. Kotanin A analogues were found to be non-toxic to mammals and the toxic principles were later identified as aflatoxins. Kotanin A is a symmetric biscoumarin with S axis chirality. Kotanin A, with its characteristic UV spectrum, is a useful chemotaxonomic marker for the Aspergillus genus.

 $\begin{array}{lll} \text{CAS Number:} & 27909\text{-}08\text{-}6 \\ \text{Molecular Formula:} & C_{24}\text{H}_{22}\text{O}_8 \\ \text{Molecular Weight:} & 438.4 \\ \end{array}$

Source: Aspergillus sp. Purity: >95% by HPLC

Kumbicin C



Code No.: BIA-K1640 Pack Sizes: 0.25 mg, 1 mg

H₃CO O

Kumbicin C is a bis-indolyl benzenoid isolated from a novel Aspergillus species, A. kumbius, by Piggott and co-workers in 2016. Structurally, kumbicin C is related to the petromicins found in a closely related species, A. muricatus and the asterriquinones from A. terreus. Biosynthetically, the unusual 2H-chromene ring system of kumbicin C is formed by cyclisation of the prenyl group of kumbicin D. Kumbicin C is active against tumor cell lines and bacteria at microgram potency.

 $\begin{array}{lll} \text{CAS Number:} & 1878151\text{-}58\text{-}6 \\ \text{Molecular Formula:} & C_{28}H_{224}N_2O_3 \\ \text{Molecular Weight:} & 436.5 \end{array}$

Source: Aspergillus sp. Purity: >95% by HPLC

L 156602

Code No.: BIA-L1621 Pack Sizes: 0.5 mg, 2.5 mg

OH NH HO OH

L 156602 is a cyclic hexapeptide isolated from a strain of Streptomyces by researchers at Merck USA and reported in 1991. L 156602 belongs to the aurantimycin class and, like other

members, is active against Gram positive bacteria. L 156602 was foremost discovered as a competitive binding inhibitor of the inflammatory peptide, C5a, to cell surface receptors on macrophages. In vivo, L 156602 profoundly suppresses footpad edema induced by concanavalin A and completely suppresses the infiltration of mononuclear leukocytes and neutrophils into the site of inflammation.

CAS Number: 125228-51-5 Molecular Formula: $C_{38}H_{64}N_{8}O_{13}$ Molecular Weight: 841.0

Source: Streptomyces sp. Purity: >95% by HPLC

L-681217

Code No.: BIA-L1044 Pack Sizes: 0.5 mg, 2.5 mg

L-681,217 is a glycolipid-type antibiotic related to the efrotomycin class, isolated from a Streptomyces sp. L 681,217 shows broad spectrum antibiotic activity against Gram positive and Gram negative bacteria. L-681,217 inhibits bacterial protein synthesis at the elongation stage, its target being elongation factor Tu (EF-Tu).

CAS Number: 93522-10-2 Molecular Formula: $C_{36}H_{53}NO_{10}$ Molecular Weight: 659.8

Source: Streptomyces sp. Purity: >95% by HPLC

Lachnone A

Code No.: BIA-L1401 Pack Sizes: 0.5 mg, 2.5 mg

Lachnone A is a chromone isolated from the filamentous fungus Lachnum sp. in 2006, along with known (2E,6S)-2,6-dimethyl-2,7-octadiene-1,6-diol. Lachnone A possesses weak activity against bacteria but has not been extensively investigated.

CAS Number: 903892-99-9 Molecular Formula: $C_{11}H_{10}O_4$ Molecular Weight: 206.2

Source: Unidentified fungus
Purity: >95% by HPLC

Lagosin

Code No.: **BIA-L1613** Pack Sizes: **1 mg, 5 mg**

Lagosin is a pentaene antifungal produced by Streptomyces, first isolated in 1958 by researchers at MIT in the USA. The discovery was soon followed by several independent isolations as lagosin and cogomyin. Initially these metabolites were thought to be isomeric, but Pandey and colleagues at NCI definitively demonstrated they



were identical. Structurally, lagosin is 14-hydroxyfilipin III and the most polar member of the filipin family of fungicides. Lagosin exhibits broad spectrum antifungal and antitumor activity and, like filipin, acts via interaction with cell membrane sterols.

CAS Number: 6834-98-6 Molecular Formula: $C_{35}H_{58}O_{12}$ Molecular Weight: 670.8

Source: Streptomyces sp. Purity: >95% by HPLC

Lasalocid

Code No.: BIA-L1533 Pack Sizes: 5 mg, 25 mg

HO OH OH OH OH

Lasalocid is a polyether ionophore with potent antibacterial activity isolated from Streptomyces lasaliensis, first reported in 1951. Lasalocid was developed as an animal health product for treatment of coccidia. Lasalocid is able to form neutral complexes with monovalent and divalent cations and transport the ions through apolar phase (including lipid bilayer membranes). Interestingly, lasalocid can also transport larger organic cations, e.g. protonated dopamine.

CAS Number: 25999-31-9 Molecular Formula: $C_{34}H_{54}O_8$ Molecular Weight: 590.8

Source: Streptomyces sp. Purity: >98% by HPLC

Lasalocid sodium

Code No.: BIA-L1302 Pack Sizes: 5 mg, 25 mg

Lasalocid sodium is a salt of the polyether ionophore lasalocid, with potent antibacterial activity. Lasalocid was developed as an animal health product for treatment of coccidia. Lasalocid is able to form neutral complexes with monovalent and divalent cations and transport the ions through apolar phase, including lipid bilayer membranes. Interestingly, lasalocid can also transport larger organic cations, e.g. protonated dopamine.

CAS Number: 25999-20-6 Molecular Formula: C₃₄H₅₃NaO₈ Molecular Weight: 612.8

Source: Streptomyces sp. Purity: >95% by HPLC

Lateropyrone

Code No.: BIA-L1128 Pack Sizes: 5 mg, 25 mg

Lateropyrone is an unusual heterocyclic metabolite isolated from Fusarium avenaceum with antibacterial and antifungal activity. The metabolite was independently characterised as Antibiotic Y and found to be an important metabolite marker for strains of F.

avenaceum. Lack of availability has hitherto restricted a more intensive investigation of this metabolite.

CAS Number: 93752-78-4
Molecular Formula: $C_{15}H_{10}O_{8}$ Molecular Weight: 318.2
Source: Fusarium sp.
Purity: >99% by HPLC

Lecanoric acid



Code No.: BIA-L1669 Pack Sizes: 1 mg, 5 mg

Lecanoric acid is an orcinol depside found in a broad range of lichen and fungal species. Structurally, lecanoric acid is a dimer of orsellinic acid. Lecanoric acid is a broad antimicrobial agent, exhibiting more potent activity against bacteria than fungi. Lecanoric acid is also active as an immunomodulator, antioxidant, an inhibitor of histidine decarboxylase and is involved in gene activation/suppression. Lecanoric acid is an important standard in the chemotaxonomy of lichens.

CAS Number: 480-56-8 Molecular Formula: $C_{16}H_{14}O_7$ Molecular Weight: 318.3

Source: Parmotrema sp. Purity: >95% by HPLC

Leptomycin A

Code No.: BIA-L1045 Pack Sizes: 0.1 mg, 0.5 mg

Leptomycin A, a methyl analogue of leptomycin B, is a minor component of the leptomycin complex produced by selected Streptomyces species. Leptomycin B is a potent inhibitor of the nuclear transport receptor CRM1. Leptomycin A is also likely to inhibit nuclear transport and may offer differences in exporter selectivity. Leptomycin A shows antimicrobial activity against Schizosaccaromyces pombe and Mucor rouxianus.

CAS Number: 87081-36-5 Molecular Formula: $C_{32}H_{46}O_{6}$ Molecular Weight: 526.7

Source: Streptomyces sp. Purity: >99% by HPLC

Leptomycin B

Code No.: BIA-L1046 Pack Sizes: 0.5 mg, 2.5 mg

Leptomycin B is the dominant and most studied member of the leptomycin class, isolated from selected Streptomyces strains. Leptomycin B is a nanomolar active and specific nuclear export inhibitor. Its target is CRM1/exportin1, a protein in the nuclear export sequence (NES). Proteins affected include c-Abl, cyclin B1,



HIV-1 Rev, IkB, MPF, MAP/ERK, MDM2/p53, NF-kB/IkB7 and PKA. Leptomycin B inhibits export of many RNAs, e.g. COX-2 and c-FOS mRNA. Leptomycin B also shows antifungal, antibacterial and potent antitumor activities.

CAS Number: 87081-35-4 Molecular Formula: $C_{33}H_{48}O_6$ Molecular Weight: 540.7

Source: Streptomyces sp. Purity: >99% by HPLC

Leucanicidin

Code No.: BIA-L1369 Pack Sizes: 0.5 mg, 2.5 mg

Leucanicidin is a potent nematocide and insecticide belonging to the bafilomycin class. Lack of access to the pure metabolite has limited its investigation, however structural differences between leucanicidin and the bafilomycins offer scope for investigations into the use of V-ATPases as therapeutic targets.

CAS Number: 91021-66-8 Molecular Formula: $C_{42}H_{70}O_{13}$ Molecular Weight: 783.0

Source: Streptomyces sp. Purity: >95% by HPLC

Leucinostatin A

Code No.: BIA-L1451 Pack Sizes: 0.5 mg, 2.5 mg

HO OH NICHA)

Leucinostatin A is the major component of an atypical nonapeptide complex produced by Paecilomyces lilacinus, first reported in 1973. Leucinostatins display broad bioactivity against Gram positive bacteria, fungi, plants and tumor cell lines. Leucinostatin A inhibits respiration by uncoupling oxidative phosphorylation and is potentiated by inhibitors such as venturicidin and oligomycin. More recently, interest in leucinostatin has focused on understanding its activity as an insulin-like growth factor I regulator, an ionophore, inhibitor of cell surface expression of viral glycoproteins and its anti-trypanosomal activity.

CAS Number: 76600-38-9
Molecular Formula: $C_{62}H_{111}N_{11}O_{13}$ Molecular Weight: 1218.6
Source: Paecilomyces sp.
Purity: >95% by HPLC

Leucomycin A1

Code No.: BIA-L1538 Pack Sizes: 1 mg, 5 mg

Leucomycin A1 is a major metabolite from the leucomycin complex, a family of closely related macrocyclic lactone antibiotics produced by Streptomyces kitasatoensis, discovered in 1953. Leucomycin A1 is one of the more potent members of the complex. Leucomycin complex (kitasamycin) is used as an animal health product for control of Gram positive bacteria, Gram negative cocci, leptospira and mycoplasma. Little is known about the activity of individual analogues within the complex as their limited availability has restricted investigation.

CAS Number: 16846-34-7 Molecular Formula: $C_{40}H_{67}NO_{14}$ Molecular Weight: 786.0

Source: Streptomyces kisatoensis

Purity: >99% by HPLC

Leucomycin A13

Code No.: BIA-L1365 Pack Sizes: 1 mg, 5 mg

Leucomycin A13 is the most non-polar member of the leucomycin complex, a family of closely related macrocyclic lactone antibiotics produced by Streptomyces kitasatoensis. Leucomycin A13 is used for HPLC resolution of the leucomycin complex, however no detailed investigation of its pharmacology has been reported.

CAS Number: 78897-52-6 Molecular Formula: $C_{41}H_{69}NO_{14}$ Molecular Weight: 800.0

Source: Streptomyces kisatoensis

Purity: >99% by HPLC

Leucomycin A4

Code No.: BIA-L1364 Pack Sizes: 1 mg, 5 mg

Leucomycin A4 is a major metabolite from the leucomycin complex, a family of closely related macrocyclic lactone antibiotics produced by Streptomyces kitasatoensis, discovered in 1953. Leucomycin A4 is one of the more potent members of the complex. Leucomycin complex (kitasamycin) is used as an animal health product for control of Gram positive bacteria, Gram negative cocci, leptospira and mycoplasma. Little is known about the activity of individual analogues within the complex as their limited availability has restricted investigation.

CAS Number: 18361-46-1 Molecular Formula: $C_{41}H_{67}NO_{15}$ Molecular Weight: 814.0

Source: Streptomyces kisatoensis

Purity: >99% by HPLC

Leucomycin A5

Code No.: BIA-L1357 Pack Sizes: 1 mg, 5 mg

Leucomycin A5 is a major metabolite of the leucomycin complex, a family of closely related macrocyclic lactone antibiotics produced by Streptomyces kitasatoensis, and discovered in 1953. Leucomycin A5 is one of the more potent antibiotics of the complex. Leucomycin complex (kitasamycin) is used as an animal health product for control of Gram positive bacteria, Gram negative cocci, leptospira and mycoplasma. Little is known about the activity of individual analogues within the complex as their limited availability has restricted investigation.

CAS Number: 18361-45-0 Molecular Formula: $C_{39}H_{65}NO_{14}$ Molecular Weight: 771.9

Source: Streptomyces kisatoensis

Purity: >98% by HPLC

Leucomycin complex

Code No.: BIA-L1551 Pack Sizes: 25 mg, 100 mg

Leucomycin complex (kitasamycin) is a family of closely related macrocyclic lactone antibiotics produced by Streptomyces kitasatoensis, discovered in 1953. The complex contained over 14 components with analogues A1, A4, A5, and A13 being the most abundant analogues. Leucomycin complex is used as an animal health product for control of Gram positive bacteria, Gram negative cocci, leptospira and mycoplasma.

CAS Number: 1392-21-8

Molecular Formula: -Molecular Weight:

Source: Streptomyces kisatoensis

Purity: >95% by HPLC

Lexithromycin

Code No.: **BIA-L1519** Pack Sizes: **5 mg, 25 mg**

Lexithromycin is an early semi-synthetic erythromycin, prepared by reaction of the 9-keto moiety to methyl oxime. The structural change improves the pH stability profile and hydrophobicity of lexithromycin for better in vivo absorption. This same rationale was used to greater effect with roxithromycin and, as a result, lexithromycin was quickly superseded and has not been not extensively studied. Like all erythromycins, lexithromycin shows broad spectrum antibacterial activity and acts by binding to the 30S and 50S ribosomal sub-units, blocking protein synthesis.

CAS Number: 53066-26-5
Molecular Formula: C₃₈H₇₀N₂O₁₃
Molecular Weight: 763.0
Source: Semi-synthetic
Purity: >98% by HPLC

Lincomycin

Code No.: BIA-L1457 Pack Sizes: 5 mg, 25 mg

Lincomycin is a polar, water soluble, broad spectrum antibiotic first isolated from Streptomyces licolnensis by researchers at Upjohn in 1962. Lincomycin was the first of a unique structural class, the lincosamides, containing a rare amino acid, 4-propyl-N-methylproline, coupled to an equally rare aminomethylthio-octopyranoside sugar. Lincomycin and semi-synthetic analogues are often incorrectly considered to be aminoglycosides but share little or no structural similarity. Lincomycin is a broad spectrum antibiotic with activity against anaerobic bacteria and protozoans. Lincomycin acts by binding to the 23S ribosomal subunit, blocking protein synthesis. Lincomycin has been extensively studied with over 7,000 literature citations.

CAS Number: 154-21-2 Molecular Formula: $C_{18}H_{34}N_2O_6S$ Molecular Weight: 406.5

Source: Streptomyces sp. Purity: >99% by HPLC

Lincomycin hydrochloride

Code No.: BIA-L1458 Pack Sizes: 5 mg, 25 mg

Lincomycin hydrochloride is a salt of lincomycin formed at the basic N-methylproline. The hydrochloride salt is the preferred formulation for pharmaceutical use. Lincomycin hydrochloride is a broad spectrum antibiotic with activity against anaerobic bacteria and protozoans. Lincomycin acts by binding to the 23S ribosomal subunit, blocking protein synthesis. Lincomycin has been extensively studied with over 7,000 literature citations.

CAS Number: 859-18-7Molecular Formula: $C_{18}H_{35}CIN_2O_6S$ Molecular Weight: 443.0Source: Streptomyces sp.
Purity: >98% by HPLC

a-Lipomycin

Code No.: BIA-L1418 Pack Sizes: 1 mg, 5 mg

a-Lipomycin is an unusual pentaenone tetramic acid first isolated from Streptomyces aureofaciens in 1972. Lipomycin has potent Gram positive antibacterial activity with no activity against fungi, including yeasts. The antibiotic activity is antagonized by lecithin and some sterols, implying alterations of the cell membrane.

CAS Number: 51053-40-8 Molecular Formula: C₃₂H₄₅NO₉ Molecular Weight: 587.7

Source: Streptomyces sp. Purity: >95% by HPLC

LL Z1640-2

Code No.: BIA-L1160 Pack Sizes: 1 mg, 5 mg

LL Z1640-2 (5Z-7-oxozeaenol) is a cis-enone resorcylic acid lactone first reported in 1978 and later rediscovered as an irreversible and highly selective TAK 1 inhibitor. TAK1 is a MAPKKK involved in the p38 signalling cascade for pro-inflammation signals such as cytokines. LL Z1640-2 effectively prevents inflammation in animal models.

CAS Number: 253863-19-3
Molecular Formula: C₁₉H₂₂O₇
Molecular Weight: 362.4
Source: Cupularia sp

Source: *Curvularia* sp. Purity: >99% by HPLC

LL Z1640-4

Code No.: BIA-L1161 Pack Sizes: 1 mg, 5 mg

LL Z1640-4 is a cis-enol resorcylic acid lactone first reported in 1978 exhibiting both antiviral and antiprotozoan activity. More recently, LL Z1640-2, containing the essential cis-enone system that selectively inhibits TAK 1, has gained literature focus. With its "inactive" cis-enol, LL Z1640-4 is an ideal negative control to help dissect the selectivity of the MAP kinases.

 $\begin{array}{lll} \text{CAS Number:} & 66018\text{-}41\text{-}5 \\ \text{Molecular Formula:} & C_{19}\text{H}_{24}\text{O}_{7} \\ \text{Molecular Weight:} & 364.4 \\ \text{Source:} & \textit{Curvularia} \text{ sp.} \\ \text{Purity:} & >99\% \text{ by HPLC} \\ \end{array}$

Lobaric acid



Code No.: BIA-L1671 Pack Sizes: 0.5 mg, 2.5 mg

Lobaric acid, a hydrophobic orcinol depsidone found in a broad range of lichen species notably within the genera Stereocaulon and Parmelia, was first reported by Asahina and Nonamura in 1935. Like many other lichen acids, lobaric acid displays a broad pharmacology. Most recently, lobaric acid was shown to inhibit cysteinyl-leukotriene formation leading to muscle contraction in Taenia coli, type 12(S)-lipoxygenase, and to interfere with protein-protein interactions. Lobaric acid is an important standard in the chemotaxonomy of lichens.

CAS Number: 522-53-2 Molecular Formula: $C_{25}H_{28}O_8$ Molecular Weight: 456.5 Source: Parmelia sp. Purity: >95% by HPLC

Lovastatin

Code No.: BIA-L1264 Pack Sizes: 25 mg, 100 mg

Lovastatin (mevinolin) is a metabolite first isolated from Monascus ruber and later found in several other fungal species. Lovastatin is a potent inhibitor of HMG-CoA. HMG-CoA reductase is the rate-controlling enzyme of the mevalonate pathway, responsible for the biosynthesis of cholesterol. Lovastatin was developed as a drug as a hypolipemic agent.

CAS Number: 75330-75-5 Molecular Formula: $C_{24}H_{36}O_5$ Molecular Weight: 404.5

Source: *Monascus ruber*Purity: >98% by HPLC

Luteoreticulin

Code No.: BIA-L1129 Pack Sizes: 0.5 mg, 2.5 mg

Luteoreticulin is a rare nitrophenyl pyranone closely related to aureothin, neoaureothin and its unusual photoisomers SNF4435C and SNF4435D. Metabolites within this class are potent antitumor agents with pronounced immunosuppressive activity and more recently have been shown to reverse multi-drug resistance. The lack of availability of luteoreticulin has hitherto restricted a more intensive investigation of this interesting metabolite.

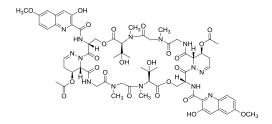


CAS Number: 22388-89-2 Molecular Formula: $C_{19}H_{19}NO_5$ Molecular Weight: 341.4

Source: Streptomyces sp. Purity: >99% by HPLC

Luzopeptin A

Code No.: BIA-L1139 Pack Sizes: 1 mg, 5 mg



Luzopeptin A is a member of the echinomycin (quinomycin A) class of antitumor and antibiotic agents that act by forming a stable DNA complex by bis-intercalation. Luzopeptin A is also a potent inhibitor of HIV-1 reverse transcriptase.

CAS Number: 75580-37-9 Molecular Formula: $C_{64}H_{78}N_{14}O_{24}$ Molecular Weight: 1427.4

Source: Actinomadura sp. (luzonensis)

Purity: >99% by HPLC

Lydicamycin

Code No.: BIA-L1047 Pack Sizes: 0.5 mg, 2.5 mg

Lydicamycin belongs to a novel structural class with highly selective antibiotic activity. Recent research has shown that lydicamycin and the related metabolites, TPU-0037A and TPU-0037C, are highly active against MRSA. Lydicamycin is also closely related to BN 4515N which was isolated from a strain of Microtetraspora as a neuritogenic agent.

CAS Number: 133352-27-9 Molecular Formula: $C_{47}H_{74}N_4O_{10}$ Molecular Weight: 855.1

Source: Streptomyces sp. Purity: >95% by HPLC

Maculosin

NEW

Code No.: BIA-M1714 Pack Sizes: 5 mg, 25 mg

HO ON THE

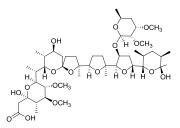
Maculosin (cyclo(L-Pro-L-Tyr)) is the most active of a family of diketopiperazine metabolites isolated from a strain of Alternaria alternata as a host-specific phytotoxin for spotted knapweed. The structure of maculosin was confirmed by synthesis from L-proline and L-tyrosine. Maculosin has since been reported as a metabolite in many species of bacteria, actinomycetes and fungi and is an

important chemical and bioassay standard for dereplication of polar active metabolites.

CAS Number: 4549-02-4 Molecular Formula: $C_{14}H_{16}N_2O_3$ Molecular Weight: 260.3 Source: Alternaria sp. Purity: >95% by HPLC

Maduramicin

Code No.: BIA-M1308 Pack Sizes: 5 mg, 25 mg



Maduramicin is a polyether antibiotic first isolated from Actinomadura yunnaense (formerly Nocardia sp. X-14868) in 1963. Maduramicin is a broad spectrum anticoccidial also active against Treponema and Cryptosporidium. Maduramicin is an ionophore, forming complexes with monovalent cations, with a higher affinity for K+ than Na+. Maduramicin is used as the ammonium salt in animals to prevent coccidiosis and to promote growth.

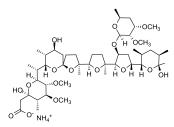
CAS Number: 79356-08-4 Molecular Formula: $C_{47}H_{80}O_{17}$ Molecular Weight: 917.1

Source: Actinomadura yunnaense

Purity: >98% by HPLC

Maduramicin ammonium

Code No.: BIA-M1542 Pack Sizes: 5 mg, 25 mg



Maduramicin ammonium is prepared from maduramicin by taking advantage of the acidic carboxylic acid which ionises and readily forms the salt in ammonium hydroxide solutions. The ammonium salt is the preferred formulation in animals to prevent coccidiosis and to promote growth. Maduramicin is also active against Treponema and Cryptosporidium. Maduramicin is an ionophore, forming complexes with monovalent cations, with a higher affinity for K+ than Na+.

CAS Number: 84878-61-5 Molecular Formula: $C_{47}H_{83}NO_{17}$ Molecular Weight: 934.2

Source: Streptomyces sp. Purity: >98% by HPLC



Marcfortine A

Code No.: BIA-M1103 Pack Sizes: 1 mg, 5 mg



Marcfortine A is an indole alkaloid, isolated from Aspergillus and Pencillium species, with potent nematocidal activity. The marcfortines are structurally related to paraherquamides and are thought to act by blocking cholinergic neuromuscular transmission.

CAS Number: 75731-43-0 Molecular Formula: $C_{28}H_{35}N_3O_4$ Molecular Weight: 477.6

Source: *Penicillium* sp. Purity: >99% by HPLC

Meclocycline

Code No.: BIA-M1464 Pack Sizes: 5 mg, 25 mg

Meclocycline is a semi-synthetic tetracycline prepared by dehydration of the 6-hydroxy group of chlortetracycline to yield an exocyclic 6-methylene. Meclocycline is a close structural analogue of methacycline. Like all tetracyclines, meclocycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal sub-units, blocking protein synthesis. Meclocycline has been extensively cited in the literature with over 400 references.

CAS Number: 2013-58-3 Molecular Formula: $C_{22}H_{21}CIN_2O_8$ Molecular Weight: 476.9

Source: Semi-synthetic
Purity: >98% by HPLC

Meclocycline sulfosalicylate

Code No.: BIA-M1465 Pack Sizes: 5 mg, 25 mg

Meclocycline sulfosalicylate is a salt prepared from demeclocycline taking advantage of the basic dimethylamino group which protonates and readily forms a salt in solution with 2-hydroxy-3-carboxybenzenesulphonic acid. Like all tetracyclines, meclocycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal sub-units, blocking protein synthesis. The unusual complex counter-ion is likely to add an antiseptic component to the use of the compound for skin infections.

CAS Number: 73816-42-9
Molecular Formula: C₂₉H₂₇ClN₂O₁₄S
Molecular Weight: 695.1

Source: Semi-synthetic Purity: >98% by HPLC

Meleagrin

Code No.: BIA-M1446 Pack Sizes: 1 mg, 5 mg

Meleagrin is an alkaloid with antitumor and antibiotic activity, isolated from a number of species of Penicillium. Meleagrin is a common taxonomic marker for fungal contamination of foodstuffs. Despite its wide detection in the environment, the mode of action and bioprofile has not been extensively reported. Note that meleagrin, the fungal metabolite, should not be confused with the low molecular weight protein, also meleagrin.

CAS Number: 71751-77-4

Molecular Formula: $C_{23}H_{23}N_5O_4$ Molecular Weight: 433.5

Source: Penicillium sp.

Purity: >98% by HPLC

Methacycline

Code No.: BIA-M1467 Pack Sizes: 5 mg, 25 mg

Methacycline is a semi-synthetic tetracycline prepared by dehydration of the 6-hydroxy group of oxytetracycline to yield an exocyclic 6-methylene. Like all tetracyclines, methacycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal subunits, blocking protein synthesis. Methacycline has been extensively cited in the literature with over 400 references.

CAS Number: 914-00-1 Molecular Formula: $C_{22}H_{22}N_2O_8$ Molecular Weight: 442.4

Source: Semi-synthetic Purity: >98% by HPLC

Methacycline hydrochloride

Code No.: BIA-M1468 Pack Sizes: 5 mg, 25 mg

Methacycline hydrochloride is a salt prepared from methacycline taking advantage of the basic dimethylamino group which protonates and readily forms a salt in hydrochloric acid solutions. The hydrochloride is the preferred formulation for pharmaceutical applications. Like all tetracyclines, methacycline hydrochloride shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal subunits, blocking protein synthesis.

CAS Number: 3963-95-9 Molecular Formula: $C_{22}H_{23}CIN_2O_8$ Molecular Weight: 478.9

Source: Semi-synthetic Purity: >98% by HPLC



3-Methylorsellinic acid



Code No.: BIA-M1661 Pack Sizes: 5 mg, 25 mg

3-Methylorsellinic acid (β -orcinolcarboxylic acid) was originally identified as a degradation product of barbatinic acid in 1928. In 1976, 3-methylorsellinic acid was isolated as a co-metabolite of its dimer, 4-O-demethylbarbatic acid, and asterriquinone from Aspergillus terreus by researchers at Kanazawa University, Japan. 3-Methylorsellinic acid is an important sub-unit of diverse depsides found in lichens. 3-Methylorsellinic acid is a useful standard for dereplication of fungal secondary metabolites.

CAS Number: 4707-46-4 Molecular Formula: $C_9H_{10}O_4$ Molecular Weight: 182.2

Source: Aspergillus sp.
Purity: >95% by HPLC

6-Methylsalicylic acid



Code No.: BIA-M1655 Pack Sizes: 5 mg, 25 mg

6-Methylsalicylic acid is a core salicylic acid unit in the biosynthesis of many secondary metabolites in actinomycetes, fungi and lichens. Reports of its isolation date back to 1917 when it was noted as a precursor of epoxydon biosynthesis. 6-Methylsalicylic acid is an important polar co-metabolite present in many fungi, notably Trichomonacea, and in lichens. 6-Methylsalicylic acid is a useful standard for bioassay and analytical techniques for dereplication of common co-metabolites.

CAS Number: 567-61-3 Molecular Formula: $C_8H_8O_3$ Molecular Weight: 152.2

Source: Aspergillus terreus
Purity: >95% by HPLC

O-Methylsterigmatocystin

Code No.: BIA-M1214 Pack Sizes: 1 mg, 5 mg

O-Methylsterigmatocystin is a xanthone isolated from several species of Aspergillus and Chaetomium. O-Methylsterigmatocystin is structurally related to the aflatoxins and, while it is considered mutagenic, teratogenic and carcinogenic, it is less widespread and potent than the aflatoxins. Research on this metabolite has largely focused on its genetic and phenotypic relationship to aflatoxins.

CAS Number: 17878-69-2 Molecular Formula: $C_{19}H_{14}O_6$ Molecular Weight: 338.3

Source: Chaetomium sp. Purity: >95% by HPLC

9-Methylstreptimidone

Code No.: BIA-M1404 Pack Sizes: 0.5 mg, 2.5 mg

9-Methylstreptimidone is a straight chain member of the glutarimide family, isolated from a number of species of Streptomyces and first reported in 1974. Methylstreptimidone exhibits antifungal and prophylactic antiviral activity. The antiviral activity appears to be due to its ability to induce the production of interferon. Methylstreptimidone has also been shown to be an inhibitor of the nuclear factor, NF-kB.

CAS Number: 51867-94-8 Molecular Formula: $C_{17}H_{25}NO_4$ Molecular Weight: 307.4

Source: Streptomyces sp. Purity: >95% by HPLC

O-Methylviridicatin

Code No.: BIA-M1149 Pack Sizes: 1 mg, 5 mg

3-O-Methylviridicatin is a metabolite produced by several species of Penicillium. Recently, 3-O-methylviridicatin was shown to be a strong inhibitor of TNFa-induced replication of HIV. Lack of availability has hitherto restricted a more intensive investigation of this interesting metabolite.

CAS Number: 6152-57-4 Molecular Formula: $C_{16}H_{13}NO_2$ Molecular Weight: 251.3 Source: Penicillium sp. Purity: >99% by HPLC

Mevastatin

Code No.: **BIA-M1209** Pack Sizes: **25 mg, 100 mg**

Mevastatin (compactin) is a diterpene produced by several species of the genera Penicillium and Monascus, first reported in 1976. Mevastatin, the prototype of the statin class, is a potent competitive inhibitor of HMG-CoA reductase, a regulatory enzyme for cholesterol biosynthesis. Mevastatin has also been shown to induce apoptosis by inhibiting post-translational prenylation of proteins such as Ras, increasing eNOS mRNA and protein levels by blocking the geranylgeranylation of Rho, and inhibiting myoblast fusion. It induces cell cycle arrest in late G1 phase and may induce bone morphogenic protein-2 (BMP-2).

CAS Number: 73573-88-3 Molecular Formula: $C_{23}H_{34}O_5$ Molecular Weight: 390.5 Source: Penicillium sp. Purity: >95% by HPLC



Micafungin

Code No.: BIA-M1422 Pack Sizes: 1 mg, 5 mg

Micafungin is a semi-synthetic cyclic lipopeptide belonging to the echinocandin class that was reported in 1999 from Fujisawa in Japan. Unlike other marketed semi-synthetic derivatives in this class, micafungin is not derived from echinocandin but rather from FR901379 which contains a phenolic sulfate to enhance aqueous solubility, a serious limitation in the class. Micafungin inhibits the synthesis of $\beta\text{-}(1,3)\text{-}D\text{-}glucan,}$ an essential component of the cell wall of susceptible fungi and is extensively referenced in the literature with over 700 citations.

CAS Number: 235114-32-6 Molecular Formula: $C_{56}H_{71}N_9O_{23}S$ Molecular Weight: 1270.3

Source: Semi-synthetic Purity: >98% by HPLC

Micafungin sodium

Code No.: BIA-M1550 Pack Sizes: 1 mg, 5 mg

Micafungin sodium is the salt of the semi-synthetic cyclic lipopeptide, micafungin, a member of the echinocandin class that was reported in 1999 from Fujisawa in Japan. The sodium salt takes advantage of the aryl sulfate moiety providing improved water solubility and is the preferred salt for pharmaceutical applications. Like all echinocandins, micafungin inhibits the synthesis of $\beta\text{-}(1,3)\text{-}D\text{-}glucan$, an essential component of the cell wall of susceptible fungi.

CAS Number: 208538-73-2 Molecular Formula: C₅₆H₇₀N₉NaO₂₃S

Molecular Weight: 1292.3

Source: Semi-synthetic Purity: >98% by HPLC

Micrococcin P1

Code No.: BIA-M1590 Pack Sizes: 0.5 mg, 2.5 mg

Micrococcin P1 holds the remarkable position in antibiotic discovery as the first of the early antibiotics to be lost to science. Micrococcin P1 is a thiopeptide originally isolated from Micrococcus sp. by Su at Oxford in 1948. Later, Heatley and Doery purified micrococcin and defined its physico-chemical properties and activity. The producing strain was lost, causing a hiatus in research of this antibiotic family until the discovery of the related thiocillins in 1976.

CAS Number: 67401-56-3 Molecular Formula: $C_{48}H_{49}N_{13}O_{9}S_{6}$ Molecular Weight: 1144.4 Source: Bacillus sp. Purity: >95% by HPLC

Milbemectin

Code No.: BIA-M1553 Pack Sizes: 5 mg, 25 mg

Milbemectin is a mixture of the two most abundant milbemycin analogues, A3 and A4, produced by Streptomyces hydroscopicus subsp. aureolarcrimosus. Originally defined as a mixture of 30% milbemycin A3 and 70% milbemycin A4, our product is specifically blended to meet this specification. Milbemectin is a highly selective and potent insecticide and acaricide used as an agri-chemical for crop protection.

CAS Number: 51596-10-2 & 51596-11-3 Molecular Formula: $C_{32}H_{46}O_7$ (for milbemycin A4)

Molecular Weight: 542.7

Source: Semi-synthetic Purity: >95% by HPLC

Milbemycin A3

Code No.: BIA-M1051 Pack Sizes: 1 mg, 5 mg



Milbemycins are a complex family of macrocyclic lactones containing a highly characteristic spiroketal group, produced by Streptomyces hydroscopicus subsp. aureolarcrimosus. Milbemycin A3 is a major member of a group of analogues containing a 25-methyl substituent. Milbemycin A3 is a highly selective and potent nematocide and insecticide. Like the closely related avermectins, milbemycins are thought to act by opening glutamate sensitive chloride channels.

CAS Number: 51596-10-2 Molecular Formula: $C_{31}H_{44}O_{7}$ Molecular Weight: 528.7

Source: Streptomyces hygroscopicus

Purity: >95% by HPLC

Milbemycin A3 oxime

Code No.: BIA-M1531 Pack Sizes: 1 mg, 5 mg

Milbemycin A3 oxime is a semi-synthetic macrocyclic lactone prepared by the oxidation and oximation of milbemycin A3. Milbemycin A3 oxime is the minor component ($\sim\!30\%$) in the commercial product milbemycin oxime, marketed for endo- and exo-parasite infections. Like the other milbemycin/avermectins, milbemycin A3 oxime acts by opening glutamate sensitive chloride channels in neurons of invertebrates leading to paralysis by hyperpolarisation of these cells and signal transfer blocking.

CAS Number: 114177-14-9 Molecular Formula: $C_{31}H_{43}NO_{7}$ Molecular Weight: 541.7

Source: Semi-synthetic Purity: >99% by HPLC

Milbemycin A4

Code No.: BIA-M1052 Pack Sizes: 1 mg, 5 mg

Milbemycins are a complex family of macrocyclic lactones containing a highly characteristic spiroketal group, produced by Streptomyces hydroscopicus subsp. aureolarcrimosus. Milbemycin A4 is the dominant member of a group of analogues containing a 25-ethyl substituent. Milbemycin A4 is a highly selective and potent nematocide and insecticide. Like the closely related avermectins, milbemycins are thought to act by opening glutamate sensitive chloride channels.

CAS Number: 51596-11-3 Molecular Formula: $C_{32}H_{46}O_{7}$ Molecular Weight: 542.7

Source: Streptomyces hygroscopicus subsp.

aureolacrimosus

Purity: >95% by HPLC

Milbemycin A4 oxime

Code No.: BIA-M1532 Pack Sizes: 1 mg, 5 mg

Milbemycin A4 oxime is a semi-synthetic macrocyclic lactone prepared by the oxidation and oximation of milbemycin A4. Milbemycin A4 oxime is the major component (\sim 70%) in the commercial product, milbemycin oxime, marketed for endo- and exo-parasite infections. Like the other milbemycin/avermectins, milbemycin A4 oxime acts by opening glutamate sensitive chloride channels in neurons of invertebrates, leading to paralysis by hyperpolarisation of these cells and signal transfer blocking.

CAS Number: 93074-04-5
Molecular Formula: C₃₂H₄₅NO₇
Molecular Weight: 555.7
Source: Semi-synthe

Source: Semi-synthetic Purity: >99% by HPLC

Milbemycin D

Code No.: BIA-M1054 Pack Sizes: 1 mg, 5 mg

Milbemycins are a complex family of macrocyclic lactones containing a highly characteristic spiroketal group, produced by Streptomyces hydroscopicus subsp. aureolarcrimosus. Milbemycin D is a minor member of a group of analogues containing a 25-isopropyl substituent. Milbemycin D is a highly selective and potent nematocide and insecticide. Like the closely related avermectin, milbemycins are thought to act by opening glutamate sensitive chloride channels.

CAS Number: 77855-81-3 Molecular Formula: $C_{33}H_{48}O_{7}$ Molecular Weight: 556.7

Source: Streptomyces hygroscopicus

Purity: >95% by HPLC

Milbemycin oxime

Code No.: BIA-M1299 Pack Sizes: 5 mg, 25 mg

Milbemycin oxime is a semi-synthetic macrocyclic lactone prepared by the oxidation and oximation of a mixture of two natural products, milbemycin A3 and A4 (in $\sim 30:70$ ratio). Milbemycin oxime is used therapeutically for the prevention of intestinal



parasites in dogs. Like the other milbemycin/avermectins, it was developed for intestinal parasite control in animals and acts by opening glutamate sensitive chloride channels in neurons of invertebrates leading to paralysis by hyperpolarisation of these cells and signal transfer blocking.

CAS Number: 129496-10-2

Molecular Formula: C₃₂H₄₅NO₇ (for milbemycin A4 oxime)
Molecular Weight: 555.7 (for milbemycin A4 oxime)

Source: Semi-synthetic Purity: >95% by HPLC

Minocycline

Code No.: BIA-M1471 Pack Sizes: 5 mg, 25 mg

Minocycline is a semi-synthetic tetracycline prepared by sequential hydrogenolysis, nitration and reductive methylation. Minocycline, together with doxycycline, is regarded as a 'third generation' tetracycline largely replacing the natural products and pro-drugs produced in the early 1950s for mainstream antibiotic applications. Like all tetracyclines, minocycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal sub-units, blocking protein synthesis. Minocycline has been extensively cited in the literature with over 5,000 references.

 $\begin{array}{lll} \text{CAS Number:} & 10118\text{-}90\text{-}8 \\ \text{Molecular Formula:} & C_{23}H_{27}N_3O_7 \\ \text{Molecular Weight:} & 457.5 \end{array}$

Source: Semi-synthetic Purity: >98% by HPLC

Minocycline hydrochloride

Code No.: BIA-M1472 Pack Sizes: 5 mg, 25 mg

Minocycline hydrochloride is a salt prepared from minocycline, taking advantage of the two basic dimethylamino groups which protonate and readily form a salt from hydrochloric acid solutions. The hydrochloride is the preferred formulation for pharmaceutical applications. Like all tetracyclines, minocycline is a broad spectrum antibacterial and antiprotozoan, and acts by binding to the 30S and 50S ribosomal sub-units, blocking protein synthesis.

CAS Number: 13614-98-7 Molecular Formula: $C_{23}H_{28}CIN_3O_7$ Molecular Weight: 493.9

Source: Semi-synthetic Purity: >98% by HPLC

Mithramycin A

Code No.: BIA-M1268 Pack Sizes: 1 mg, 5 mg

Mithramycin A was the first of the aureolic acid class of antitumor antibiotics, isolated from Streptomyces. Mithramycin inhibits transcription and protein synthesis by non-covalent binding with G-C-rich duplex DNA in the presence of magnesium and zinc ions. Mithramycin also induces differentiation of leukemic cells accompanied by an early decrease in c-myc expression, and selectively inhibits collagen-1 gene expression in human fibroblasts.

CAS Number: 18378-89-7 Molecular Formula: $C_{52}H_{76}O_{24}$ Molecular Weight: 1085.2

Source: Streptomyces argillaceus

Purity: >99% by HPLC

Mitomycin C

Code No.: BIA-M1183 Pack Sizes: 5 mg, 25 mg

Mitomycin C is the most studied of a family of highly distinctive blue/purple metabolites produced by several Streptomyces species. Mitomycin C exhibits potent antibacterial and antitumor activity and inhibits DNA synthesis by intercalation, blocking nuclear division with the induction of apoptosis in cancer cells.

CAS Number: 50-07-7 Molecular Formula: $C_{15}H_{18}N_4O_5$ Molecular Weight: 334.3

Source: Streptomyces sp. Purity: >98% by HPLC

Moenomycin complex

Code No.: BIA-M1297 Pack Sizes: 5 mg, 25 mg

Moenomycin complex is a mixture of five major components, A, A12, C1, C3 and C4, isolated from several strains of Streptomyces in the 1960s. Moenomycins are high molecular weight phosphoglycolipids with potent antibiotic activity used in animal health. Moenomycins are the only antibiotic known to selectively inhibit the transglycosylation step catalysed by penicillin-binding protein 1b.

CAS Number: 11015-37-5 Molecular Formula: $C_{69}H_{107}N_4O_{35}P$ (for A)

Molocular Weight: 1583 6

Molecular Weight: 1583.6

Source: Streptomyces sp. Purity: >95% by HPLC

Monactin

Code No.: BIA-M1055 Pack Sizes: 1 mg, 5 mg

Monactin is a member of the macrotetrolide complex produced by a range of Streptomyces species. Monactin has not previously been available for intensive investigation. Early literature reported that the related dinactin is a monovalent cation ionophore with high selectivity for ammonium and potassium. Monactin inhibits T-cell proliferation induced by IL-2 and cytokine production at nanomolar levels for IL-2, IL-4, IL-5 and IFN- γ .

CAS Number: 7182-54-9 Molecular Formula: $C_{41}H_{66}O_{12}$ Molecular Weight: 751.0

Source: Streptomyces sp. Purity: >95% by HPLC

Monazomycin

Code No.: BIA-M1400 Pack Sizes: 1 mg, 5 mg

Monazomycin is a macrocycflic polyol lactone isolated from several species of Streptoverticillium, first reported in 1963. Monazomycin is active against Gram positive bacteria with weak Gram negative activity. In solution, monazomycin exists as hydrophilic clusters which, when adsorbed onto a lipid bilayer, can induce channel formation. Monazomycin is an important bioprobe for understanding membrane channels.

 $\begin{array}{lll} \text{CAS Number:} & 11006\text{-}31\text{-}8 \\ \text{Molecular Formula:} & \text{C_{72}H$_{133}$NO$_{22}$} \\ \text{Molecular Weight:} & 1364\text{.}8 \\ \end{array}$

Source: Streptomyces sp. Purity: >95% by HPLC

Monensin A

Code No.: BIA-M1303 Pack Sizes: 5 mg, 25 mg

Monensin A is a polyether antibiotic first isolated from Streptomyces cinnamonensis in 1967. Monensin A is a broad-spectrum anticoccicidal antibiotic, also exhibiting antifungal and antiviral activity. Monensin A forms complexes with monovalent cations such as Li+, Na+, K+, Rb+, Ag+ and TI+ and is thus able to transport these cations across lipid membranes of cells, playing an important role as an Na+/H+ antiporter. It blocks intracellular protein transport and is used in animals to prevent coccidiosis, promote growth and prevent bloat. Derivatives of monensin,

monensin methyl ester and particularly monensin decyl ester, are used in ion selective electrodes.

CAS Number: 17090-79-8 Molecular Formula: $C_{36}H_{62}O_{11}$ Molecular Weight: 670.8

Source: Streptomyces sp. Purity: >95% by HPLC

Moniliformin

Code No.: **BIA-M1269** Pack Sizes: **0.5 mg, 2.5 mg**

Moniliformin is a potent, water-soluble mycotoxin produced by several species of Fusarium. Comparative toxicity studies of moniliformin in chicken cell lines revealed no toxicity to chondrocytes and macrophages, but toxicity to splenocytes, cardiac and skeletal myocytes. Moniliformin selectively inhibits mitochondrial oxidization of pyruvate and a-ketoglutarate, however the mode of action is not yet completely resolved.

CAS Number: 71376-34-6 Molecular Formula: C_4HO_3Na Molecular Weight: 120.0

Source: Fusarium moniliforme
Purity: >99% by HPLC

Monoacetylphloroglucinol

Code No.: BIA-M1378 Pack Sizes: 5 mg, 25 mg

Monoacetylphloroglucinol (MAPG) is small molecular weight phenolic metabolite belonging to the phloroglucinol (1,3,5-trihydroxybenzene) family, produced by bacteria including Pseudomonas strains. MAPG exhibits a broad range of biological activity albeit with mostly low potency. In the search for novel actives, MAPG and related metabolites are important metabolites for dereplication to eliminate leads due to high amounts of weakly potent actives. Although weakly active, this family appears to be important in the biocontrol of plant diseases by some Pseudomonas strains.

CAS Number: 480-66-0 Molecular Formula: $C_8H_8O_4$ Molecular Weight: 186.2

Source: Pseudomonas fluorescens

Purity: >95% by HPLC

Moxidectin

Code No.: BIA-M1298 Pack Sizes: 5 mg, 25 mg

Moxidectin is a semi-synthetic milbemycin derived from nemadectin by selective oxidation followed by methyloximation.



Moxidectin was patented in 1991 as an anthelmintic for internal parasite control. The presence of the methyloxime affords moxidectin a greater hydrophobicity and longer biological half-life compared to nemadectin. Moxidectin binds selectively to parasite glutamate-gated chloride ion channels and disrupts neurotransmission leading to paralysis and death of the parasite.

 $\begin{array}{lll} \text{CAS Number:} & 113507\text{-}06\text{-}5 \\ \text{Molecular Formula:} & C_{37}H_{53}NO_8 \\ \text{Molecular Weight:} & 639.8 \\ \end{array}$

Source: Semi-synthetic Purity: >95% by HPLC

Mutilin

Code No.: BIA-M1333 Pack Sizes: 1 mg, 5 mg

OH OH

Mutilin is a minor metabolite of the pleuromutilin family, originally isolated from Pleurotus mutilus. Mutilin is formed by hydrolysis of the hydroxyacetyl ester of pleuromutilin, and is a degradation product and in vivo metabolite of pleuromutilin. Interest in mutilin has focused on its potential as a substrate for generating unique metabolites via biosynthesis to provide a broader range of targets for semi-synthetic modification.

CAS Number: 6040-37-5 Molecular Formula: $C_{20}H_{32}O_3$ Molecular Weight: 320.5

Source: Semi-synthetic Purity: >99% by HPLC

Mycophenolic acid

Code No.: BIA-M1207 Pack Sizes: 25 mg, 100 mg

Mycophenolic acid is a common Penicillium metabolite first reported in the 1930s as a possible mycotoxin. Re-investigation showed mycophenolic acid to display broad antitumor, antiviral, antifungal and antiprotozoan activities. Its potent immunosuppressant activity led to its commercial development to prevent kidney transplant rejection. Mycophenolic acid acts by inhibiting inosine monophosphate dehydrogenase, controlling the rate of de novo purine synthesis in proliferating B and T lymphocytes.

 $\begin{array}{lll} \text{CAS Number:} & 24280\text{-}93\text{-}1 \\ \text{Molecular Formula:} & C_{17}\text{H}_{20}\text{O}_6 \\ \text{Molecular Weight:} & 320.3 \\ \end{array}$

Source: *Penicillium* sp. Purity: >99% by HPLC

Myriocin

Code No.: **BIA-M1219** Pack Sizes: **2.5 mg, 10 mg**

Myriocin is an a-amino fatty acid derived from several genera of fungi, notably Myriococcum, Melanconis and Isaria. Myriocin potently inhibits sphingosine biosynthesis by blocking the first enzyme in the pathway, serine palmitoyltransferase. Myriocin induces apoptosis by depleting cellular sphingolipids, inhibits proliferation of IL-2-dependent mouse cytotoxic cells and is a potent immunosuppressant.

CAS Number: 35891-70-4
Molecular Formula: $C_{21}H_{39}NO_6$ Molecular Weight: 401.5
Source: Mycelia sterilia
Purity: >97% by HPLC

Narasin

Code No.: BIA-N1363 Pack Sizes: 5 mg, 25 mg

Narasin (4-methylsalinomycin) is a polyether antibiotic isolated from Streptomyces aureofaciens in 1978. Although narasin is a close analogue of salinomycin, the metabolites are produced by different species and are not co-metabolites. Narasin is an ionophore with broad spectrum activity against Gram positive bacteria including anaerobes and mycoplasma, and also possesses antiviral and limited antifungal activity. Narasin is used in the animal health industry as an in-feed antibiotic and growth promotant.

CAS Number: 55134-13-9 Molecular Formula: $C_{43}H_{72}O_{11}$ Molecular Weight: 765.0

Source: Streptomyces aureofaciens

Purity: >98% by HPLC

Narasin sodium

Code No.: BIA-N1541 Pack Sizes: 5 mg, 25 mg

Narasin sodium is prepared from narasin taking advantage of the carboxylic acid which ionises and readily forms the salt in sodium hydroxide solutions. Narasin is an ionophore with broad spectrum activity against Gram positive bacteria including anaerobes and mycoplasma, and also possesses antiviral and limited antifungal activity. Narasin is used in the animal health industry as an in-feed antibiotic and growth promotant.

CAS Number: 58331-17-2 Molecular Formula: C₄₃H₇₁NaO₁₁ Molecular Weight: 787.0

Source: Streptomyces sp. Purity: >98% by HPLC

Nargenicin

Code No.: BIA-N1325 Pack Sizes: 1 mg, 5 mg

OH OCH

Nargenicin (CP-47,444) is a 10-membered macrocyclic lactone isolated from Nocardia in 1980 as an antibiotic. The macrocyclic lactone is anchored through vicinal carbons to a decalin bearing a pyrrole ester. Nargenicin exhibits potent activity against Gram positive bacteria, in particular MRSA strains. More recently, nargenicin has been shown to enhance retinoate-induced cell differentiation.

CAS Number: 70695-02-2 Molecular Formula: $C_{28}H_{37}NO_8$ Molecular Weight: 515.6

Source: *Nocardia argentinensis*Purity: >99% by HPLC

Nemadectin

Code No.: BIA-N1056 Pack Sizes: 1 mg, 5 mg

OH HOH OH HOH

Nemadectin is the dominant member of a class of milbemycins bearing unsaturated longer chain groups at the 25-position. Nemadectin shows pronounced nematocidal and insecticidal activity. Nemadectin is the starting material for moxidectin, a commercial anthelmintic.

CAS Number: 102130-84-7 Molecular Formula: $C_{36}H_{52}O_{8}$ Molecular Weight: 612.8

Source: Streptomyces sp. Purity: >95% by HPLC

Neoantimycin

Code No.: BIA-N1057 Pack Sizes: 0.5 mg, 2.5 mg

Neoantimycin is a rare and unusual ring-extended member of the antimycin class. Neoantimycin is produced by a Streptomyces species unrelated to antimycin-producing strains. Literature references to neoantimycin are limited but the recent discovery of the closely related metabolite, prunustatin A, as a selective GRP78 molecular chaperone down-regulator highlights the potential of this class as research probes.

CAS Number: 22862-63-1 Molecular Formula: $C_{36}H_{46}N_2O_{12}$ Molecular Weight: 698.8

Source: Streptomyces sp. Purity: >98% by HPLC

Neoaureothin

Code No.: BIA-N1058 Pack Sizes: 0.5 mg, 2.5 mg

Neoaureothin is an unusual chain-extended analogue of aureothin. Neoaureothin was first reported as a co-metabolite of neoantimycin in Streptomyces orinoci. Neoaureothin has anti-HIV and antifungal activity. Recent investigations have identified two photo-isomers of neoaureothin, SNF4435C and SNF4435D, as potent immunosuppressive agents.

CAS Number: 28900-27-8 Molecular Formula: $C_{28}H_{31}NO_6$ Molecular Weight: 477.6

Source: Streptomyces sp. Purity: >98% by HPLC

Neohydroxyaspergillic acid



Code No.: BIA-N1641 Pack Sizes: 1 mg, 5 mg

Neohydroxyaspergillic acid is small polar metabolite found in Aspergillus subgenus Circumdati first observed by Weiss and coworkers in 1958. Structurally, neohydroxyaspergillic acid is part of the aspergillic acid class, analogues of which are broadly distributed throughout the genus Aspergillus. Neohydroxyaspergillic acid exhibits antibacterial and antiviral activity and, more recently, was shown to have antiprotozoan activity.

CAS Number: 72598-34-6
Molecular Formula: $C_{12}H_{20}N_2O_3$ Molecular Weight: 240.3
Source: Aspergillus sp.
Purity: >95% by HPLC

Nidulin

Code No.: BIA-N1157 Pack Sizes: 1 mg, 5 mg

Nidulin is a depsidone produced by several fungal species with potent and selective antibacterial activity. While literature relating to nidulin is limited, it is closely related to folipastatin and unguinol, both of which have been identified as inhibitors of phospholipase A2, arachidonic acid release from rat polymorphonuclear leukocytes, and nitrendipine binding to porcine heart membrane. While showing some calcium blocking attributes, these metabolites have potential as antiinflammatory agents.



CAS Number: 10089-10-8 Molecular Formula: $C_{20}H_{17}Cl_3O_5$ Molecular Weight: 443.7 Source: Emericella sp. Purity: >99% by HPLC

Nigericin

Code No.: BIA-N1228 Pack Sizes: 5 mg, 25 mg

H₀CO H H H OH

Nigericin is a polyether antibiotic produced by Streptomyces, notably S. hygroscopicus, isolated in the 1950s. Its complex structure was finally elucidated in 1968. Nigericin is an ionophore, possessing very high affinity for monovalent cations such as Na+ and K+. Nigericin disrupts membrane potential and Golgi apparatus in mitochondria. Although nigericin can be isolated as the free acid (under acidic conditions), like most ionophores it is extracted into organic solvents and is most conveniently isolated as a salt. In vitro, nigericin has broad biological activity against Gram positive bacteria, fungi, tumor cell lines and some viruses, including HIV. Nigericin is the most common member of the polyether class which are common false positives in in vitro screening bioassays using crude microbial extracts. They are thus important standards for dereplication.

CAS Number: 28380-24-7 Molecular Formula: $C_{40}H_{68}O_{11}$ Molecular Weight: 724.9

Source: Streptomyces hygroscopicus

Purity: >98% by HPLC

Nigericin sodium

Code No.: BIA-N1220 Pack Sizes: 5 mg, 25 mg

H₃CO H H OH H OH

Nigericin sodium is a salt of the atypical polyether antibiotic, nigericin. Since nigericin is an ionophore, its very high affinity for monovalent cations such as Na+ and K+ means that formation of a salt is a facile possess occurring during purification under any but highly acidic conditions. Typically, the salts of polyether ionophores like the free acid, are readily extracted into organic solvents. The sodium ion is stabilised within a polar pocket of the structure, effectively making the salt and free acid different chemical moieties with the potential for differing pharmacology, a fact not readily appreciated in the literature.

CAS Number: 28643-80-3 Molecular Formula: $C_{40}H_{67}NaO_{11}$ Molecular Weight: 747.0

Source: Streptomyces hygroscopicus

Purity: >98% by HPLC

3-Nitropropionic acid

NEW

Code No.: BIA-N1694 Pack Sizes: 1 mg, 5 mg

OH

3-Nitropropionic acid is a small molecular weight antibacterial compound isolated by Carter and McChesney in 1949. Since this time, 3-nitropropionic acid has been found in a large number of fungi, plants and bacteria. 3-Nitropropionic acid has been responsible for a number of instances of human and animal toxicity due to mouldy foodstuffs. Recently, 3-nitropropanoic acid has found use as a chemical tool for investigating various neurodegenerative disorders.

CAS Number: 504-88-1 Molecular Formula: $C_3H_5NO_4$ Molecular Weight: 119.1 Source: Synthetic Purity: >95% by HPLC

Nodusmicin

Code No.: BIA-N1326 Pack Sizes: 1 mg, 5 mg

Nodusmicin is a co-metabolite of nargenicin, bearing the core macrocyclic lactone but lacking the pyrrole ester. Like nargenicin, nodusmicin is a potent antibiotic active against both aerobic and anaerobic bacteria. Lack of availability has restricted a more extensive investigation of nodusmicin.

CAS Number: 76265-48-0 Molecular Formula: $C_{23}H_{34}O_{7}$ Molecular Weight: 422.5 Source: Nocardia sp. Purity: >99% by HPLC

Nogalamycin

Code No.: BIA-N1575 Pack Sizes: 5 mg, 25 mg

Nogalamycin is an unusual anthracycline produced by Streptomyces nogalater var. nogalater, reported by researchers at Upjohn in 1965, containing two saccharides. The neutral monosaccharide attaches to the D ring, similar to the aminoglycoside moieties of the doxorubicin class, while the second, basic saccharide attaches to the phenolic group on the A ring in the ortho position to form a unique family of hexacyclic anthracyclines. Nogalamycin is potent antibacterial and antitumor agent that interacts with DNA by intercalation.

CAS Number: 1404-15-5 Molecular Formula: C₃₉H₄₉NO₁₆ Molecular Weight: 787.8

Source: Streptomyces sp. Purity: >95% by HPLC



Nonactin

Code No.: BIA-N1270 Pack Sizes: 1 mg, 5 mg

Nonactin is the smallest member of the macrotetrolide complex produced by a range of Streptomyces species. Originally the name, nonactin, reflected the lack of biological activity. The literature is confusing in this respect, as virtually all sources of nonactin are contaminated with small amounts of the much more active monactin. The BioAustralis nonactin has been purified to remove traces of other biologically-active macrotetrolides. Like the other macrotetrolides, nonactin is a monovalent cation ionophore with high selectivity for ammonium and potassium.

CAS Number: 6833-84-7 Molecular Formula: C₄₀H₆₄O₁₂ Molecular Weight: 736.9

Source: Streptomyces griseus
Purity: >99% by HPLC

Nornidulin

Code No.: BIA-N1159 Pack Sizes: 1 mg, 5 mg

Nornidulin is a depsidone produced by several fungal species, with potent and selective antibacterial activity. While literature on nornidulin is limited, it is closely related to folipastatin and unguinol which have both been identified as inhibitors of phospholipase A2, arachidonic acid release from rat polymorphonuclear leukocytes, and nitrendipine binding to porcine heart membrane. While showing some calcium blocking attributes, the nidulans have potential as antiinflammatory agents.

CAS Number: 33403-37-1 Molecular Formula: $C_{19}H_{15}Cl_3O_5$ Molecular Weight: 429.7 Source: Emericella sp. Purity: >99% by HPLC

Nosiheptide

Code No.: **BIA-N1574** Pack Sizes: **1 mg, 5 mg**

Nosiheptide is a bicyclic thiopeptide antibiotic produced by several species of actinomycetes, notably Streptomyces, first reported by Japanese researchers in 1970. Unlike other bicyclic thiopeptides such as thiostrepton, the second macrocyclic ring is linked by relatively fragile lactone and thiolactone bridges to the core cyclic peptide. Nosiheptide has broad spectrum antibacterial activity, and has recently demonstrated a prolonged post-antibiotic effect in both nosocomial and community-acquired MRSA compared with vancomycin. Despite its long history in animal health, nosiheptide has not been extensively studied and is regarded as a "lost antibiotic" largely escaping intensive investigation for human application.

CAS Number: 56377-79-8 Molecular Formula: $C_{51}H_{43}N_{13}O_{12}S_6$ Molecular Weight: 1222.4

Source: Streptomyces sp. Purity: >95% by HPLC

Novobiocin

Code No.: BIA-N1306 Pack Sizes: 5 mg, 25 mg

Novobiocin is an aminocoumarin antibiotic isolated from a number of species of Streptomyces. Novobiocin exhibits broad spectrum Gram positive antibiotic activity and was used clinically. Novobiocin is a potent inhibitor of bacterial DNA gyrase and a competitive inhibitor of the ATPase reaction catalysed by GyrB.

CAS Number: 303-81-1 Molecular Formula: $C_{31}H_{36}N_2O_{11}$ Molecular Weight: 612.6

Source: Streptomyces sp. Purity: >95% by HPLC

Nybomycin

Code No.: BIA-N1414 Pack Sizes: 0.5 mg, 2.5 mg

Nybomycin is an unusual heterocyclic metabolite isolated from several Streptomyces species, first reported in 1961. Nybomycin possesses antiviral and antibacterial activity. The spectrum and mode of action of nybomycin has not been extensively studied.

CAS Number: 30408-30-1 Molecular Formula: $C_{16}H_{14}N_2O_4$ Molecular Weight: 298.3

Source: Streptomyces sp. Purity: >95% by HPLC

Nystatin A1

Code No.: BIA-N1416 Pack Sizes: 5 mg, 25 mg



Nystatin is a polyene antifungal containing a conjugated tetraene and a diene, isolated as a complex of three components A1, A2 and A3 from Streptomyces noursei and first reported in 1950. Nystatin, like most polyene antifungals, binds to sterols in the fungal cell membrane leading to formation of ion channels in the wall, ion imbalance and cell death. Nystatin is an established bioprobe and widely-used antifungal reagent with over 4,000 literature citations.

CAS Number: 1400-61-9 Molecular Formula: $C_{47}H_{75}NO_{17}$ Molecular Weight: 926.1

Source: Streptomyces sp. Purity: >95% by HPLC

Ochratoxin A

Code No.: BIA-O1195 Pack Sizes: 1 mg, 5 mg

Ochratoxin A is a chlorinated benzopyran coupled to phenylalanine, produced by several Aspergillus and Penicillium sp. associated with food spoilage. Ochratoxins are widely distributed in the environment and are known to be nephrotoxic, teratogenic and possibly carcinogenic. Ochratoxin A may act by inducing DNA strand breaks, sister chromatid exchanges, DNA adduct formation, or reactive oxygen but the mechanism of action as a toxin is not yet resolved. At the molecular level, ochratoxin A specifically inhibits NK cell activity, increases growth of transplantable tumor cells in mice, increases apoptosis, activates c-Jun N terminal kinase in human kidney epithelial cells, and blocks metaphase/anaphase transition. It also inhibits plasminogen activator inhibitor-2 production by human blood mononuclear cells.

CAS Number: 303-47-9 Molecular Formula: $C_{20}H_{18}CINO_6$ Molecular Weight: 403.8

Source: Aspergillus ochraceus
Purity: >95% by HPLC

Ochratoxin B

Code No.: BIA-O1196 Pack Sizes: 1 mg, 5 mg

Ochratoxin B is the non-chlorinated analogue of the much more extensively studied ochratoxin A. It is co-produced by the same species of Aspergillus and Penicillium that are associated with food spoilage. Ochratoxin B has received little focused investigation and its mode of action and potential hazards have been inferred from ochratoxin A.

CAS Number: 4825-86-9 Molecular Formula: $C_{20}H_{19}NO_6$ Molecular Weight: 369.4

Source: Aspergillus ochraceus
Purity: >99% by HPLC

Ochratoxin C

Code No.: BIA-O1589 Pack Sizes: 1 mg, 5 mg

Ochratoxin C is a minor component of the ochratoxin complex produced by several Aspergillus and Penicillium sp. associated with food spoilage. Ochratoxin C is the ethyl ester of ochratoxin A and, despite its relatively low abundance, it is the most non-polar and the only neutral component of the complex. As such, ochratoxin C represents a different hazard to the acidic major components ochratoxins A and B. Ochratoxins are widely distributed in the environment and are known to be nephrotoxic and teratogenic, however ochratoxin C has not been extensively studied.

 $\begin{array}{lll} \text{CAS Number:} & 4865-85-4 \\ \text{Molecular Formula:} & C_{22}H_{22}\text{CINO}_6 \\ \text{Molecular Weight:} & 431.9 \\ \text{Source:} & \textit{Aspergillus} \text{ sp.} \\ \text{Purity:} & >95\% \text{ by HPLC} \\ \end{array}$

Octadecanoyl-L-homoserine lactone

Code No.: BIA-O1501 Pack Sizes: 5 mg, 25 mg

Octadecanoyl-L-homoserine lactone is an active quorum sensing modulator first recognised in Sinorhizobium meliloti. Octadecanoyl-L-homoserine lactone and other acylhomoserine lactones have been detected in hundreds of bacterial species and, while the homologues vary between species and strains, the homoserine lactones are the major chemical modulators of within and between cell communication and regulation. The most significant variable defining the function of the homoserine lactone is the length of the acyl chain, with shorter chains displaying opposing actions to the longer chains.

CAS Number: 479050-96-9
Molecular Formula: C₂₂H₄₁NO₃
Molecular Weight: 367.6
Source: Synthetic
Purity: >99% by HPLC

Octanoyl-L-homoserine lactone

Code No.: BIA-O1496 Pack Sizes: 5 mg, 25 mg

Octanoyl-L-homoserine lactone is an active quorum sensing modulator first recognised in Yersinia pseudotuberculosis. Octanoyl-L-homoserine lactone and other acylhomoserine lactones have been detected in hundreds of bacterial species and, while the homologues vary between species and strains, the homoserine lactones are the major chemical modulators of within and between cell communication and regulation. The most significant variable defining the function of the homoserine lactones is the length of the acyl chain.

CAS Number: 147852-84-4 Molecular Formula: $C_{12}H_{21}NO_3$ Molecular Weight: 227.3 Source: Synthetic



Purity: >99% by HPLC

Oleandomycin

Code No.: BIA-O1304 Pack Sizes: 5 mg, 25 mg

Oleandomycin is a 16-membered macrocyclic lactone, discovered in the 1950s, with broad spectrum antibacterial activity. Oleandomycin was developed as a human pharmaceutical but was regarded as less active than comparable products such as erythromycin and is today only available in combination with other antibiotics.

CAS Number: 3922-90-5 Molecular Formula: $C_{35}H_{61}NO_{12}$ Molecular Weight: 687.9

Source: Streptomyces sp. Purity: >95% by HPLC

Oligomycin A

Code No.: BIA-O1059 Pack Sizes: 5 mg, 25 mg

Oligomycin A is the dominant analogue of a class of macrocyclic lactones isolated from selected strains of Streptomyces sp. Oligomycin A is an inhibitor of mitochondrial F1F0-ATPase. It induces apoptosis in a variety of cell types, makes cells more susceptible to cell death, and also leads to a switch in the death mode from apoptosis to necrosis. Oligomycin A exhibits a broad biological profile including antifungal, antitumor and nematocidal activities.

 $\begin{array}{lll} \text{CAS Number:} & 579\text{-}13\text{-}5 \\ \text{Molecular Formula:} & C_{45}H_{74}O_{11} \\ \text{Molecular Weight:} & 791.1 \\ \end{array}$

Source: Streptomyces sp. Purity: >95% by HPLC

Oligomycin B

Code No.: BIA-O1060 Pack Sizes: 5 mg, 25 mg

Oligomycin B, a minor component of the oligomycin complex isolated from selected strains of Streptomyces, is an inhibitor of mitochondrial F1F0-ATPase. It makes cells more susceptible to cell death, and also leads to a switch in the death mode from apoptosis to necrosis.

 $\begin{array}{lll} \text{CAS Number:} & 11050\text{-}94\text{-}5 \\ \text{Molecular Formula:} & C_{45}H_{72}O_{12} \\ \text{Molecular Weight:} & 805.1 \\ \end{array}$

Source: Streptomyces sp. Purity: >95% by HPLC

Oligomycin C

Code No.: BIA-O1061 Pack Sizes: 1 mg, 5 mg

Oligomycin C, a minor component of the oligomycin complex isolated from selected strains of Streptomyces, is an inhibitor of mitochondrial F1F0-ATPase. It makes cells more susceptible to cell death, and also leads to a switch in the death mode from apoptosis to necrosis.

 $\begin{array}{lll} \text{CAS Number:} & 11052\text{-}72\text{-}5 \\ \text{Molecular Formula:} & C_{45}\text{H}_{74}\text{O}_{10} \\ \text{Molecular Weight:} & 775.1 \\ \end{array}$

Source: Streptomyces sp. Purity: >95% by HPLC

Oligomycin D

Code No.: BIA-O1438 Pack Sizes: 0.5 mg, 2.5 mg

Oligomycin D (rutamycin) is macrocyclic lactone belonging to the oligomycin class but identified from different species of Streptomyces in 1961. Like oligomycin A, oligomycin D inhibits mitochondrial F1F0-ATPase and is an important bioprobe to study the organisation of ATPase on the mitochondrial membrane. Oligomycin D exhibits a broad biological profile including antifungal, antitumor and nematocidal activities.

CAS Number: 1404-59-7 Molecular Formula: $C_{44}H_{72}O_{11}$ Molecular Weight: 777.0

Source: Streptomyces sp.
Purity: >95% by HPLC

Oligomycin E

Code No.: BIA-O1439 Pack Sizes: 1 mg, 5 mg

Oligomycin E (26-hydroxyoligomycin B) is a minor metabolite from the oligomycin complex produced by several species of Streptomyces. Unlike the other oligomycins, oligomycin E exhibits weak antibacterial activity and is considerably weaker as an antifungal agent.

 $\begin{array}{lll} \text{CAS Number:} & 110231\text{-}34\text{-}0 \\ \text{Molecular Formula:} & C_{45}\text{H}_{72}\text{O}_{13} \\ \text{Molecular Weight:} & 821.1 \\ \end{array}$

Source: Streptomyces sp. Purity: >95% by HPLC

Ophiobolin A

Code No.: BIA-O1063 Pack Sizes: 1 mg, 5 mg

Ophiobolin A is the dominant member of a class of phytotoxic metabolites produced by plant pathogenic fungi. Ophiobolin A acts by inhibiting calmodulin action in calcium regulation.

 $\begin{array}{lll} \text{CAS Number:} & 4611\text{-}05\text{-}6 \\ \text{Molecular Formula:} & C_{25}H_{36}O_4 \\ \text{Molecular Weight:} & 400.6 \\ \end{array}$

Source: Bipolaris leersia
Purity: >95% by HPLC

Ophiobolin B

Code No.: BIA-O1064 Pack Sizes: 1 mg, 5 mg

Ophiobolin B is a minor member of a class of phytotoxic metabolites produced by Bipolaris and other genera of plant pathogenic fungi. Ophiobolin B acts by inhibiting calmodulin action in calcium regulation.

CAS Number: 5601-74-1 Molecular Formula: $C_{25}H_{38}O_4$ Molecular Weight: 402.6

Source: Bipolaris leersia
Purity: >95% by HPLC

Ophiobolin C

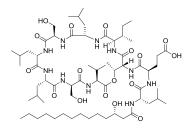
Code No.: BIA-O1199 Pack Sizes: 1 mg, 5 mg

Ophiobolin C is a member of the ophiobolin class of phytotoxic metabolites produced by many species of the genus Bipolaris. Ophiobolin C inhibits human CCR5 binding to the envelope protein gp120 and CD4 that mediate HIV-1 entry into cells. Blockade of this binding was considered by scientists at Merck as a potential new mode of action for the treatment of HIV-1 infection.

CAS Number: 19022-51-6
Molecular Formula: $C_{25}H_{38}O_3$ Molecular Weight: 386.6
Source: Bipolaris sp.
Purity: >98% by HPLC

Orfamide A

Code No.: BIA-O1430 Pack Sizes: 1 mg, 5 mg



Orfamide A is the major component of a family of cyclic lipopeptides produced by Pseudomonas fluorescens, reported in 2007. The orfamides were discovered by employing genomic analysis with an isotope-guided fractionation to identify metabolites produced by orphan gene clusters containing non-ribosomal peptide synthetases. Orfamide A has received scant investigation of its bioprofile but appears to be a selective antifungal agent. Uniquely, orfamide A lyses zoospores of the oomycete, Phytophthora ramorum, the cause of sudden oak death. Orfamide A has a profound effect on the swarming motility of bacteria on agar surfaces.

CAS Number: 939960-34-6 Molecular Formula: $C_{64}H_{114}N_{10}O_{17}$ Molecular Weight: 1295.7

Source: Pseudomonas fluorescens

Purity: >98% by HPLC

Orfamide B

Code No.: BIA-O1431 Pack Sizes: 1 mg, 5 mg



Orfamide B is a component of a family of cyclic lipopeptides produced by Pseudomonas fluorescens, reported in 2007. The orfamides were discovered by employing genomic analysis with an isotope-guided fractionation to identify metabolites produced by orphan gene clusters containing non-ribosomal peptide synthetases. Orfamide B has not been further investigated, although its activity is thought to parallel that of orfamide A and other cyclic lipopeptides produced by Pseudomonas.

CAS Number: 939960-35-7 Molecular Formula: $C_{63}H_{112}N_{10}O_{17}$ Molecular Weight: 1281.6

Source: Pseudomonas fluorescens

Purity: >98% by HPLC

Orsellinic acid



Code No.: BIA-O1657 Pack Sizes: 5 mg, 25 mg

Orsellinic acid is a common salicylic acid unit in the biosynthesis of secondary metabolites in actinomycetes, fungi and lichens, formally isolated from Chaetomium cochliodes in 1959. Orsellinic acid is a key biosynthetic intermediate of many depside metabolites in lichen and fungi with over 100 citations in Scifinder up to 2016. Orsellinic acid is also an important polar co-metabolite present in many fungi, notably Trichomonacea, however its contribution to overall bioactivity is not well understood. Orsellinic acid is a useful standard for bioassay and analytical techniques for dereplication of common co-metabolites.

CAS Number: 480-64-8 Molecular Formula: $C_8H_8O_4$ Molecular Weight: 168.2

Source: Streptomyces sp. Purity: >95% by HPLC

Orsellinic acid dimethylether



Code No.: BIA-O1659 Pack Sizes: 5 mg, 25 mg

Orsellinic acid dimethylether is a common salicylic acid unit in the biosynthesis and degradation of secondary metabolites in lichens and the ester component of the azaphilone falconensins. The bioactivity of orsellinic acid dimethylether is not well understood but it is a useful standard for bioassay and analytical techniques for dereplication of common co-metabolites.

CAS Number: 3686-57-5 Molecular Formula: $C_{10}H_{12}O_4$ Molecular Weight: 196.2 Source: Synthetic Purity: >95% by HPLC

Ostreogrycin A

Code No.: BIA-O1131 Pack Sizes: 5 mg, 25 mg

Ostreogrycin A (virginiamycin M1, streptogramin A) is the major component of the virginiamycin complex. In the 1950s this complex was independently discovered so many times that the literature became highly confusing. Ostreogrycin A is a macrocyclic lactone antibiotic that acts synergistically with the structurally unrelated cyclic depsipeptides, virginiamycin B (ostreogrycin B, streptogramin B) and virginiamycin S, to inhibit peptide elongation. This is achieved by blocking formation of a peptide bond between the growing peptide chain (peptidyl-tRNA) linked to the 50S ribosome and aminoacyl-tRNA. Ostreogrycin A is highly active against Gram positive bacteria, particularly MRSA.

CAS Number: 21411-53-0 Molecular Formula: $C_{28}H_{35}N_3O_7$ Molecular Weight: 525.6

Source: Streptomyces sp. Purity: >99% by HPLC

(+)Oxanthromicin



Code No.: **BIA-O1627** Pack Sizes: **0.25 mg, 1 mg**

(+)-Oxanthromicin is an unusual dimeric anthrone epoxide coproduced with staurosporine by Streptomyces sp. MST-134270, reported by Capon and co-workers in 2014 as an inducer of the mislocalisation K-Ras on the cell membrane. (+)-Oxanthromicin was also found to act synergistically with staurosporine, a more potent active in this assay. (+)-Oxanthromicin is an enantiomer of (-)-oxanthromicin isolated from an Actinomadura sp. SCC 1646 by researchers at Schering as an antifungal and antibacterial in 1984.

CAS Number: 1616622-08-2 Molecular Formula: $C_{36}H_{30}O_{12}$ Molecular Weight: 654.6

Source: Streptomyces sp. Purity: >95% by HPLC

Oxindole



Code No.: BIA-O1735 Pack Sizes: 5 mg, 25 mg

$$\bigcup_{N} O \Rightarrow \bigcup_{N} OH \Rightarrow \bigcup_{N} OH$$

Oxindole is a simple indole analogue isolated from both bacteria (Chromobacterium violaceum) and fungi (a basidiomycete, Calyptella sp. and an ascomycete, Pencillium sp.). Oxindole exists as the dominant tautomer of 2-hydroxyindole both in solution and as a solid. Oxindole has been reported as an inhibitor of phospholipase A2 and platelet aggregation. Its unusual distribution in microbes makes oxindole a useful standard for analytical and bioassay dereplication of crude microbial extracts.

CAS Number: 59-48-3 Molecular Formula: C_8H_7NO Molecular Weight: 133.2 Source: Synthetic Purity: >95% by HPLC



7-Oxostaurosporine

Code No.: BIA-O1137 Pack Sizes: 1 mg, 5 mg



7-Oxostaurosporine is the oxidised and highly fluorescent analogue of UCN-01 and UCN-02. 7-Oxostaurosporine is a potent inhibitor of protein kinase C and formation of cellular blebs induced by phorbols. It inhibits the cell cycle at the G2 stage with the accumulation of 4C DNA cells and possesses comparable activity against tumor cells lines to UCN-01. Despite its close relationship to UCN-01 and staurosporine, limited access to the metabolite has restricted a more complete investigation of its properties.

 $\begin{array}{lll} \text{CAS Number:} & 141196\text{-}69\text{-}2 \\ \text{Molecular Formula:} & C_{28}H_{24}N_4O_4 \\ \text{Molecular Weight:} & 480.5 \\ \end{array}$

Source: Streptomyces sp. Purity: >98% by HPLC

Oxychloroaphine

Code No.: BIA-O1527 Pack Sizes: 1 mg, 5 mg

Oxychloroaphine (1-phenazinecarboxamide) is a simple phenazine produced by several species of Pseudomonas. Oxychloroaphine is a weakly active antifungal metabolite that plays a role in the biocontrol of plant diseases by several Pseudomonas strains. Oxychloroaphine and related phenazines are important dereplication standards in discovery research to eliminate leads due to high amounts of weakly potent actives.

CAS Number: 550-89-0 Molecular Formula: $C_{13}H_9N_3O$ Molecular Weight: 223.2

Source: Pseudomonas aeruginosa

Purity: >98% by HPLC

Oxytetracycline

Code No.: **BIA-O1336** Pack Sizes: **5 mg, 25 mg**

Oxytetracycline (terramycin) is a linear, tetracyclic broad spectrum antibiotic originally isolated from Streptomyces rimosus in 1949. Like all tetracyclines, oxytetracycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal sub-units, blocking protein synthesis: Oxytetracycline, although less coloured than other tetracyclines, is still a pigment and is thus sensitive to environmental and storage conditions. Commercial oxytetracycline may contain significant levels of degradation products.

CAS Number: 79-57-2 Molecular Formula: C22H24N2O9 Molecular Weight: 460.4

Source: Streptomyces sp. Purity: >98% by HPLC

Oxytetracycline hydrochloride

Code No.: BIA-O1507 Pack Sizes: 5 mg, 25 mg

Oxytetracycline hydrochloride is a salt prepared from oxytetracycline taking advantage of the basic dimethylamino group which protonates readily to form the salt in hydrochloric acid solutions. The hydrochloride is the preferred formulation for pharmaceutical applications. Like all tetracyclines, oxytetracycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal sub-units, blocking protein synthesis.

CAS Number: 2058-46-0 Molecular Formula: $C_{22}H_{25}CIN_2O_9$ Molecular Weight: 496.9

Source: Streptomyces sp. Purity: >99% by HPLC

Padanamide A



Code No.: BIA-P1639 Pack Sizes: 1 mg, 5 mg

Padanamide A (actinoramide A) was isolated independently from marine Streptomyces strains by researchers at University of British Columbia, Canada and SCRIPPS in California, USA in 2011. Padanamide is a unique linear peptide featuring three uncommon amino acids, 2-amino-4-ureidobutanoic acid (Auba), and 4-amino-3-hydroxy-2-methyl-5-phenylpentanoic acid (Ahmppa), and two rare but known amino acids, piperazic acid (Pip) and 3β-hydroxyleucine (Hle). Although possessing an unusual structure, padanamide has to date only been shown to exhibit weak antitumor and antimicrobial activity.

CAS Number: 1314881-80-5 Molecular Formula: $C_{31}H_{47}N_7O_9$ Molecular Weight: 661.8

Source: Streptomyces sp. Purity: >95% by HPLC

Palitantin



Code No.: BIA-P1701 Pack Sizes: 0.5 mg, 2.5 mg

Palitantin is a polar neutral metabolite isolated from Penicillium palitans by Birkinshaw and Raistrick from the London School of Hygiene and Tropical Medicine in 1936. Palitantin is a cyclitol-like metabolite bearing a heptadiene chain, the conjugated diene giving palitantin its highly characteristic UV spectrum. Palitantin has been found in a number of Penicillium species and is a useful metabolite for chemotaxonomy of the genus. Palitantin is a potent antifungal active with minimal toxicity to mammalian cells.



CAS Number: 15265-28-8
Molecular Formula: C₁₄H₂₂O₄
Molecular Weight: 254.3

Source: *Penicillium* sp. Purity: >95% by HPLC

Paraherquamide A

Code No.: BIA-P1065 Pack Sizes: 1 mg, 5 mg

Paraherquamide A was first reported as a mycotoxin related to the indole tremorgenic mycotoxins. Subsequent research identified a potent, non-toxic paralysis of nematodes which led to the metabolite's development as a candidate anthelmintic. Paraherquamide A is a selective, competitive, cholinergic antagonist that distinguishes subtypes of cholinergic receptors.

CAS Number: 77392-58-6 Molecular Formula: $C_{28}H_{35}N_3O_5$ Molecular Weight: 493.6

Source: Penicillium simplicissimum

Purity: >95% by HPLC

Paraherquamide E

Code No.: BIA-P1118 Pack Sizes: 0.5 mg, 2.5 mg

Paraherquamide E is a member of the paraherquamide family which causes a potent non-toxic paralysis of nematodes and led to investigation as anthelmintics. Although paraherquamide A has received more attention, pparaherquamide E is the more potent anthelmintic in vivo. Paraherquamide E was the most potent of a series of paraherquamide analogues tested for insecticidal activity against a hemipteran (LD50 $0.089\ \mu g/nymph)$.

CAS Number: 125600-53-5 Molecular Formula: $C_{28}H_{35}N_3O_4$ Molecular Weight: 477.6 Source: Penicillium sp. Purity: >99% by HPLC

Parvodicin complex

Code No.: BIA-P1372 Pack Sizes: 5 mg, 25 mg

Parvodicin complex is a family of glycopeptides with potent antibiotic activity, isolated from Actinomadura parvosata. Structurally the parvodicins share a common cyclic peptide core with ristocetin. The analogues within the complex vary in the fatty acid substitution on the aminosugar. Like other glycopeptides in this class, parvodicin complex inhibits cell wall formation by binding to D-alanine-D-alanine residues. Parvodicin complex is a precursor to the synthetic glycopepide, dalbavancin.

CAS Number: 187888-13-7

 $Molecular\ Formula: \quad C_{83}H_{88}CI_2N_8O_{29}\ (for\ C1)$

Molecular Weight: 1732.5

Source: Actinomadura parvosata

Purity: >95% by HPLC

Paxilline

Code No.: **BIA-P1271** Pack Sizes: **1 mg, 5 mg**

Paxilline is a tremorgenic mycotoxin isolated from species of Penicillium, Acremonium and Emericella. Paxilline selectively blocks high-conductance Ca2+-activated potassium channels and inhibits binding to the cerebellar inositol 1,4,5-triphosphate (InsP(3)) receptor.

CAS Number: 57186-25-1 Molecular Formula: $C_{27}H_{33}NO_4$ Molecular Weight: 435.6

Source: *Penicillium paxilli*Purity: >99% by HPLC

PC-766B

Code No.: BIA-P1554 Pack Sizes: 1 mg, 5 mg



PC-766B is a 16-membered macrolide antibiotic produced by Nocardia brasiliensis, reported by researchers at Sumitomo in 1993. Structurally, PC-766B is a member of bafilomycin class, featuring a rare butadiene side-chain. PC-766B is active against Gram positive bacteria and some fungi and yeasts. It is active against murine tumor cells in vitro and in vivo, and weakly inhibitory against Na/K-ATPase in vitro.

CAS Number: 108375-77-5 Molecular Formula: $C_{43}H_{68}O_{12}$ Molecular Weight: 777.0

Source: *Nocardia brasiliensis*Purity: >95% by HPLC

Penigequinolone A

Code No.: BIA-P1066 Pack Sizes: 0.5 mg, 2.5 mg

Penigequinolone A is a rare fungal metabolite produced by selected Penicillium species. Penigequinolone A is isolated as an inseparable mixture with its 19-epimer, penigequinolone B. Limited literature cites penigequinolone A as a pollen growth inhibitor.

CAS Number: 180045-91-4 Molecular Formula: $C_{27}H_{33}NO_6$ Molecular Weight: 467.6 Source: Penicillium sp.

Purity: >99% by HPLC (total epimers)

Penitrem A

Code No.: BIA-P1272 Pack Sizes: 1 mg, 5 mg

Penitrem A is a tremorgenic mycotoxin isolated from Penicillium species. Penitrem A is a selective blocker of high-conductance $Ca2^+$ - activated potassium channels.

CAS Number: 12627-35-9 Molecular Formula: $C_{37}H_{44}CINO_6$ Molecular Weight: 634.2

Source: *Penicillium palitans*Purity: >99% by HPLC

Penicolinate A



Code No.: BIA-P1629 Pack Sizes: 1 mg, 5 mg

Penicolinate A, a bis-picolinic ester linked by a decamethylene bridge, was first isolated from Penicillium sp. BCC16054 by

researchers at BIOTEC, Thailand in 2013. Penicolinlate A is active against malaria, mycobacteria and mammalian tumor cell lines. Structurally, penicolinate A represents a "dimeric" ester of the antibiotic, fusaric acid. This dimerization affords a much broader bioprofile than that of fusaric acid.

CAS Number: 1418291-68-5 Molecular Formula: $C_{24}H_{32}N_2O_4$ Molecular Weight: 412.5

Source: *Unidentified fungus*Purity: >95% by HPLC

Pentostatin

Code No.: BIA-P1273 Pack Sizes: 1 mg, 5 mg

Pentostatin is a potent antitumor antibiotic isolated from a Streptomyces species. Pentostatin is a potent inhibitor of adenine deaminase and has been used therapeutically as an antitumor agent.

CAS Number: 53910-25-1 Molecular Formula: $C_{11}H_{16}N_4O_4$ Molecular Weight: 268.3

Source: Streptomyces sp. Purity: >98% by HPLC

Pestalotin

Code No.: BIA-P1067 Pack Sizes: 0.5 mg, 2.5 mg

Pestalotin is a pyran-2-one metabolite produced by Pencillium decumbens. Pestalotin is a gibberellin synergist and plant growth stimulator. Pestalotin does not influence elongation of rice seedlings when given alone, but acts synergistically to enhance gibberellic acid-induced elongation.

CAS Number: 34565-32-7 Molecular Formula: $C_{11}H_{18}O_4$ Molecular Weight: 214.3

Source: Penicillium decumbens
Purity: >99% by HPLC

Petromurin C



Code No.: BIA-P1648 Pack Sizes: 0.5 mg, 2.5 mg

Petromurin C was isolated as a component of a complex of bisindolyl benzenoids from Petromyces muricatus (Aspergillus muricatus) by researchers at Hoshi University, Japan in 1997. Petromurin C is a 5-hydroxyindoyl analogue of asterriquinol D



dimethylether and together with the other petromurins A, B and D, comprises a highly distinctive chemotaxonomic profile that typifies A. muricatus. Petromurin C exhibits weak antitumor activity but has not been extensively investigated to date.

CAS Number: 194608-29-2 Molecular Formula: $C_{26}H_{24}N_2O_5$ Molecular Weight: 444.5

Source: Aspergillus sp.
Purity: >95% by HPLC

PF1163A



Code No.: BIA-P1703 Pack Sizes: 0.5 mg, 2.5 mg

PF1163A is an unusual 13-membered depsipeptide isolated from an undescribed species of Pencillium by researchers at Meiji Seika Kaisha and reported in 2000 as an antifungal active. The macrocycle of PF1163A comprises a modified N-methyltyrosine conjugated with a 9-hydroxytetradecanoic acid. The total synthesis and absolute stereochemistry were reported in 2014. PF1163A is a selective antifungal agent with low mammalian toxicity. PF1163A acts on ergosterol biosynthesis, inhibiting C-4 sterol methyl oxidase, and acts synergistically with fluconazole against azole resistant Candida albicans.

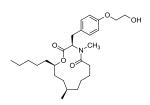
CAS Number: 258871-59-9 Molecular Formula: $C_{27}H_{43}NO_6$ Molecular Weight: 477.6

Source: *Unidentified fungus*Purity: >95% by HPLC

PF1163B



Code No.: BIA-P1704 Pack Sizes: 0.5 mg, 2.5 mg



PF1163B is an unusual 13-membered depsipeptide isolated from an undescribed species of Pencillium by researchers at Meiji Seika Kaisha and reported in 2000 as an antifungal active. The macrocycle of PF1163B comprises a modified N-methyltyrosine conjugated with a 9-hydroxytetradecanoic acid. Structurally, PF1163B is the dehydroxy analogue of the more polar PF1163A. FF1163B is a selective antifungal agent with low mammalian toxicity. PF1163B acts on ergosterol biosynthesis, inhibiting C-4 sterol methyl oxidase, and acts synergistically with fluconazole against azole resistant Candida albicans.

CAS Number: 258871-60-2 Molecular Formula: $C_{27}H_{43}NO_5$ Molecular Weight: 461.6

Source: *Unidentified fungus*Purity: >95% by HPLC

Phanerosporic acid



Code No.: BIA-P1691 Pack Sizes: 5 mg, 25 mg

Phanerosporic acid is the major metabolite isolated from the white wood rot fungus, Phanerochaete chrysosporium, reported by Arnone and co-workers in 1989. Phanerosporic acid is a hydrophobic orsellinic acid with a 14'-hydroxypentadecyl chain replacing the methyl 6-methyl moiety. Phanerosporic acid has broad Gram positive and Gram negative antibiotic activity, and stimulates root elongation of Lepidium sativum (garden cress). Phanerosporic acid has pronounced activity against Helicobacter pylori.

CAS Number: 124709-28-0 Molecular Formula: $C_{22}H_{36}O_5$ Molecular Weight: 380.5

Source: *Phanerochaete* sp. Purity: >95% by HPLC

Phenelfamycin E

Code No.: BIA-P1289 Pack Sizes: 1 mg, 5 mg

Phenelfamycin E is the major analogue of the phenelfamycin complex produced by several species of Strepyomyces. The phenelfamycins are potent antibiotics with good activity against Gram positive bacteria, notably Clostridium difficile, however phenelfamycin E has received little attention in the literature.

CAS Number: 114451-31-9 Molecular Formula: $C_{65}H_{95}NO_{21}$ Molecular Weight: 1226.5

Source: Streptomyces sp. Purity: >95% by HPLC

Phloroglucinol

Code No.: BIA-P1379 Pack Sizes: 5 mg, 25 mg

Phloroglucinol (1,3,5-trihydroxybenzene) is the core structure of a large family of substituted phenolics with broad, albeit weak, biological activity. Phloroglucinol is a useful metabolite for HPLC/DAD and bioassay dereplication.

CAS Number: 108-73-6 Molecular Formula: $C_6H_6O_3$ Molecular Weight: 128.1 Source: Synthetic Purity: >95% by HPLC



Phomopsin A

Code No.: BIA-P1193 Pack Sizes: 1 mg, 5 mg

Phomopsin A is a an acidic 13-membered cyclic hexapeptide-like metabolite with three unusual amino acids linked in an 'ansa' macrocycle with a tripeptide tail, terminating in a dicarboxylic acid. Phomopsin A is a potent mycotoxin produced by the fungus, Phomopsis leptostromiformis, and causes lupinosis in livestock fed infected lupins. Phomopsin A is an important bioprobe for understanding cellular structural proteins. It binds selectively to dimeric tubulin at a site overlapping that of vinblastine and maytansine, inhibiting the formation of the microtubule spindle to block cell division. Uniquely, phomopsin A protects tubulin from decay.

CAS Number: 64925-80-0 Molecular Formula: $C_{36}H_{45}CIN_6O_{12}$ Molecular Weight: 789.2

Source: Phomposis leptostromiformis

Purity: >98% by HPLC

Piericidin A

Code No.: BIA-P1069 Pack Sizes: 1 mg, 5 mg

Piericidin A is the major analogue of a family of pyridyl antibiotics isolated from selected Streptomyces species. It is a specific, potent inhibitor of NADH-ubiquinone oxidoreductase (Complex I) that binds to ubiquinone binding site(s). Piericidin A inhibits both mitochondrial and bacterial NADH-ubiquinone oxidoreductases, binding close to NUOD-NUOB interface.

CAS Number: 2738-64-9 Molecular Formula: $C_{25}H_{37}NO_4$ Molecular Weight: 415.6

Source: Streptomyces sp. Purity: >95% by HPLC

Pimaricin

Code No.: **BIA-P1210** Pack Sizes: **25 mg, 100 mg**

Pimaricin is a macrocyclic tetraene originally isolated from Streptomyces natalensis in 1957. Pimaricin exhibits broad spectrum antifungal activity against yeast and filamentous fungi by binding specifically to ergosterol to block fungal growth. Unlike the related polyenes, nystatin and filipin, pimaricin does not change the permeability of the plasma membrane. Pimaricin is used in the food industry for surface treatment of cheeses as a mould inhibitor.

CAS Number: 7681-93-8 Molecular Formula: C₃₃H₄₇NO₁₃ Molecular Weight: 665.7

Source: Streptomyces sp. Purity: >95% by HPLC

Pimecrolimus

Code No.: BIA-P1385 Pack Sizes: 1 mg, 5 mg

Pimecrolimus is a semi-synthetic, macrocyclic lactone derived from ascomycin by activation of the 32-hydroxy group with a triflate ester, and nucleophilic substitution with chloride under phase transfer conditions to provide the chloro analogue. Pimecrolimus has been targeted for treatment of inflammatory skin disorders. Like all tacrolimus analogues, pimecrolimus binds to receptor protein, FKBP12. The complex then binds to mTOR preventing it from interacting with target proteins. Pimecrolimus is extensively cited in the literature with over 2,000 citations.

CAS Number: 137071-32-0 Molecular Formula: $C_{43}H_{68}CINO_{11}$ Molecular Weight: 810.5

Source: Streptomyces hygroscopicus

Purity: >95% by HPLC

Pimprinine

Code No.: **BIA-P1070** Pack Sizes: **1 mg, 5 mg**

Pimprinine is an indole alkaloid produced by many species of Streptomyces. Pimprinine is a potent inhibitor of monoamine oxidase. More recently, pimprinine showed promising anticonvulsant activity in electric seizure threshold tests in mice, comparable to phenylhydantoin. Pimprinine also inhibits tremorine-induced tremors and analgesia in mice.

CAS Number: 13640-26-1 Molecular Formula: $C_{12}H_{10}N_2O$ Molecular Weight: 198.2

Source: Streptomyces sp. Purity: >95% by HPLC

Pipacycline

Code No.: BIA-P1473 Pack Sizes: 5 mg, 25 mg



Pipacycline (mepicycline) is a semi-synthetic tetracycline formed by a Mannich condensation of formaldehyde and 4-hydroxyethylpiperazine with tetracycline. The introduction of the piperazine improves bioavailability, but Mannich bases are prodrugs, converting back to the parent compound. Pipacycline is used commercially as a salt in combination with penicillin V for parenteral use (penimepicycline). The intrinsic in vitro activity and SARs for the amide region of the tetracycline molecule have not been investigated extensively. Pipacycline has not been extensively cited in the literature.

 $\begin{array}{lll} \text{CAS Number:} & 1110\text{-}80\text{-}1 \\ \text{Molecular Formula:} & C_{29}H_{38}N_4O_9 \\ \text{Molecular Weight:} & 586.6 \\ \end{array}$

Source: Semi-synthetic
Purity: >98% by HPLC

Piperafizine A

Code No.: BIA-P1156 Pack Sizes: 1 mg, 5 mg

Piperafizine A is a methylated diketopiperazine formed by the condensation of phenylalanine, produced by a number of species in the Streptomyces genus. Piperafizine A exhibits little activity in vitro but potentiates vincristine antitumor potency. The mechanism of action has not been characterised.

 $\begin{array}{lll} \text{CAS Number:} & 130603\text{-}59\text{-}7 \\ \text{Molecular Formula:} & C_{19}H_{16}N_2O_2 \\ \text{Molecular Weight:} & 304.3 \\ \end{array}$

Source: Streptomyces sp. Purity: >99% by HPLC

Pirlimycin

Code No.: BIA-P1459 Pack Sizes: 1 mg, 5 mg

Pirlimycin is a semi-synthetic lincosamide prepared from clindamycin by hydrolysing the propyl N-methylproline and reannealing a 4-ethylpipecolic acid. Pirlimycin is more hydrophobic than clindamycin and is more potent against a number of important pathogens. Like other members of the lincosamide family, pirlimycin is a broad spectrum antibiotic with activity against anaerobic bacteria and protozoans. Pirlimycin acts by binding to the 23S ribosomal subunit, blocking protein synthesis. Pirlimycin has been less extensively researched than the older lincosamides.

 $\begin{array}{lll} \text{CAS Number:} & 79548\text{-}73\text{-}5 \\ \text{Molecular Formula:} & C_{17}\text{H}_{31}\text{CIN}_2\text{O}_5\text{S} \end{array}$

Molecular Weight: 411.0

Source: Semi-synthetic Purity: >99% by HPLC

Pirlimycin hydrochloride

Code No.: BIA-P1504 Pack Sizes: 5 mg, 25 mg

Pirlimycin hydrochloride is a salt of the semi-synthetic tetracycline analogue, pirlimycin. The hydrochloride salt forms at the basic pipercolic acid moiety and is the preferred pharmaceutical formulation. Like other members of the lincosamide family, pirlimycin hydrochloride is a broad spectrum antibiotic with activity against anaerobic bacteria and protozoans. Pirlimycin hydrochloride acts by binding to the 23S ribosomal subunit, blocking protein synthesis. Pirlimycin hydrochloride has been less extensively researched than the older more established lincosamides.

CAS Number: 78822-40-9 Molecular Formula: $C_{17}H_{32}Cl_2N_2O_5S$

Molecular Weight: 447.4

Source: Semi-synthetic Purity: >99% by HPLC

Platencin

Code No.: **BIA-P1178** Pack Sizes: **0.1 mg, 0.5 mg**

Platencin is a novel, broad spectrum, Gram-positive antibiotic produced by strains of Streptomyces platensis. Platencin is more potent than its analogue, platensimycin. Platencin shows potent in vivo efficacy without any observed toxicity. Platencin targets two essential proteins, b-ketoacyl-acyl carrier protein (ACP) synthase II (FabF) and III (FabH) whereas platensimycin targets only FabF.

CAS Number: 869898-86-2 Molecular Formula: $C_{24}H_{27}NO_6$ Molecular Weight: 425.5

Source: Streptomyces sp. Purity: >99% by HPLC

Platensimycin

Code No.: BIA-P1177 Pack Sizes: 0.25 mg, 1 mg

Platensimycin is a novel, broad spectrum, Gram-positive antibiotic produced by strains of Streptomyces platensis. Its discovery was heralded by high profile publication and commentary in the scientific and lay press. Platensimycin was discovered by a target-based, whole-cell screening strategy using an antisense differential sensitivity assay, based on the inhibition of fatty acid synthesis. Platensimycin inhibits bacterial growth by selectively inhibiting the elongation enzyme, b-ketoacyl acyl carrier protein synthase (FabF) of the fatty acid synthesis pathway.

CAS Number: 835876-32-9 Molecular Formula: $C_{24}H_{27}NO_7$ Molecular Weight: 441.2

Source: Streptomyces sp. Purity: >95% by HPLC

Pleuromutilin

Code No.: BIA-P1204 Pack Sizes: 25 mg, 100 mg



Pleuromutilin is a diterpene produced by several species of basidomycete, notably the genus Pleurotus, discovered in 1951. Pleuromutilin is a potent and highly selective antibiotic active against a range of Gram positive bacteria, with no cross resistance to existing antibiotic classes due to its unique mode of action. Pleuromutilin inhibits protein synthesis by binding to domain V of 23S rRNA and this has led to the development of many semisynthetic analogues as new generation antibiotics, such as tiamulin and retapamulin.

CAS Number: 125-65-5Molecular Formula: $C_{22}H_{34}O_5$ Molecular Weight: 378.5Source: Pleurotus sp.
Purity: >95% by HPLC

Pneumocandin B0

Code No.: BIA-P1274 Pack Sizes: 1 mg, 5 mg

Pneumocandin B0 is the major analogue of a family of lipopeptides isolated from some species of Cryptosporiopsis, Glarea and Pezicula. Pneumocandin B0 is a potent antifungal and acts by inhibiting the synthesis of $\beta\text{-}(1,3)\text{-}D\text{-}glucan,$ an essential component of the cell wall of susceptible fungi.

CAS Number: 135575-42-7 Molecular Formula: $C_{50}H_{80}N_8O_{17}$ Molecular Weight: 1065.2

Source: Glarea lozoyensis
Purity: >95% by HPLC

Polymyxin E complex

Code No.: BIA-P1319 Pack Sizes: 25 mg, 100 mg

Polymyxin E (colistin) is a complex of closely related cyclic peptides E1 and E2, with additional minor analogues. Polymyxin E is produced by Bacillus polymyxa var. colistinus, and is a highly basic, atypical cyclic peptide which incorporates the unusual amino acid, diaminobutyric acid. Head-to-tail coupling of lysine completes the macrocycle. Balancing the polar cyclic peptide is a hydrophobic tail with short chain fatty acids. Polymyxin E is a broad spectrum antibiotic active against Gram negative bacteria. The mechanism of action involves disruption of the bacterial outer membrane by a detergent-like effect.

CAS Number: 1066-17-7

 $Molecular\ Formula: \quad C_{53}H_{100}N_{16}O_{13}\ (for\ E1)$

Molecular Weight: 1169.5

Source: Bacillus polymyxa
Purity: >95% by HPLC

Pravastatin sodium

Code No.: BIA-P1275 Pack Sizes: 25 mg, 100 mg

Pravastatin sodium is the salt of pravastatin, a ring-opened member of the statin family. Pravastatin is produced biosynthetically from compactin (mevastatin) by a number of microorganisms, notably Absidia, Cunninghamella, Syncephalastrum, Nocardia or Streptomyces. Typically, statins like compactin, lovastatin and simvastatin possess a β-hydroxy lactone ring which is a pro-drug for the readily ring-opened dihydroxyacid generally regarded as the active HMG-CoA reductase inhibitor. Importantly, the free carboxylic acid enables pravastatin to be freely water soluble within biological pH ranges.

CAS Number: 81131-70-6 Molecular Formula: $C_{23}H_{35}O_7Na$ Molecular Weight: 446.5 Source: Absidia sp. Purity: >98% by HPLC

Prodigiosin

Code No.: **BIA-P1194** Pack Sizes: **0.5 mg, 2.5 mg**

Prodigiosin is an intensely red pyrrole pigment produced by several bacteria, most notably Serratia marcescens. Prodigiosin has a broad biological profile with activity against fungi, tumor cell lines and malaria. It was shown to be an immunosuppressant in 2007. Prodigiosin acts via caspase inhibition to induce apoptosis in human primary cancer cells. Prodigiosin also acts as an inducer of p21WAF1/CIP1 expression via transforming growth factor- β receptor pathway, and activates NAG-1 via glycogen synthase kinase- 3β .

CAS Number: 82-89-3 Molecular Formula: $C_{20}H_{25}N_3O$ Molecular Weight: 323.4

Source: Serratia marcescens
Purity: >95% by HPLC

Pseudoerythromycin A enol ether

Code No.: BIA-P1349 Pack Sizes: 1 mg, 5 mg

Pseudoerythromycin A enol ether is a degradation product of erythromycin formed by a complex internal rearrangement of erythromycin A on exposure to neutral to weakly alkaline conditions. The C6–OH forms an internal enol ether with the C9 ketone of erythromycin, while the C11-OH attacks the carbonyl of the lactone to reduce the macrocycle from a 14- to an 11-



membered macrolide. Synthetically, pseudoerythromycin A enol ether is prepared by reacting erythromycin enol ether with carbonate. Pseudoerythromycin A enol ether is devoid of antibiotic activity but is an important analytical standard for erythromycin A stability studies.

CAS Number: 105882-69-7 Molecular Formula: $C_{37}H_{65}NO_{12}$ Molecular Weight: 715.9

Source: Semi-synthetic Purity: >98% by HPLC

Pseudomonic acid

Code No.: BIA-P1206 Pack Sizes: 25 mg, 100 mg

Pseudomonic acid is a potent antibiotic produced by Pseudomonas fluorescens, reported by Fuller et al., in 1971. Pseudomonic acid has broad spectrum activity against Gram positive bacteria and was approved for topical human use in 1985. Pseudomonic acid acts as a potent and selective inhibitor of isoleucyl-tRNA synthetase.

CAS Number: 12650-69-0 Molecular Formula: $C_{26}H_{44}O_{9}$ Molecular Weight: 500.6

Source: Pseudomonas fluorescens

Purity: >95% by HPLC

Pseurotin A

Code No.: BIA-P1104 Pack Sizes: 1 mg, 5 mg

Pseurotin A is a fungal metabolite with an unusual heterospirocyclic ring system. It has potent neuritogenic activity in PC12 phaechromocytoma cells, a useful model for adrenergic neuronal differentiation. Pseurotin A induces multipolar and branching neurites comparable to $\beta\textsc{-NGF}$, an endogenous neurotrophic factor. Pseurotin A also exhibits chitinase inhibition and acts synergistically with azole antifungal agents.

CAS Number: 58523-30-1
Molecular Formula: C22H25NO8
Molecular Weight: 431.4

Source: Aspergillus fumigatus
Purity: >99% by HPLC

Psoromic acid

NEW

Code No.: BIA-P1675 Pack Sizes: 0.5 mg, 2.5 mg

Psoromic acid is a ß-orcinol depsidone found in a broad range of lichen species, notably within the genera, Usnea, Psoroma and Alectoria. The diverse distribution of psoromic acid makes it an important standard for lichen chemotaxonomy. Although first isolated in the 1880s, the structure was not resolved until the 1930s by Asahina and Shibata. Recently, psoromic acid has been reported as having broad activity as an inhibitor of HIV integrase, RabGGTase and Rab prenylation, and as an antitumor and antimalarial agent.

CAS Number: 7299-11-8 Molecular Formula: $C_{18}H_{14}O_{8}$ Molecular Weight: 358.3 Source: Usnea sp. Purity: >95% by HPLC

Puromycin

Code No.: **BIA-P1230** Pack Sizes: **25 mg, 100 mg**

Puromycin is a nucleoside antibiotic isolated from Streptomyces alboniger in the 1950s as an anti-trypanosomal agent with antibiotic activity. Puromycin is non-selective, inhibiting RNA by blocking ribosomal translation. Puromycin is used in cell biology to select mammalian cell lines that have been transformed by vectors that express puromycin-N-acetyl-transferase.

CAS Number: 53-79-2 Molecular Formula: C22H29N7O5 Molecular Weight: 471.5

Source: Streptomyces alboniger
Purity: >98% by HPLC

Puromycin aminonucleoside

Code No.: BIA-P1222 Pack Sizes: 10 mg, 50 mg

Puromycin aminonucleoside is a semi-synthetic derivative of puromycin which lacks the methoxyphenylalanyl moiety. Puromycin aminonucleoside is the key intermediate in the synthesis of semi-synthetic analogues of puromycin. It does not inhibit protein synthesis or induce apoptosis, but exhibits antitumor properties. Puromycin aminonucleoside-induced nephrosis is a well-described model of human idiopathic nephrotic syndrome, suppressing integrin expression in cultured glomerular epithelial cells

CAS Number: 58-60-6 Molecular Formula: $C_{12}H_{18}N_6O_3$ Molecular Weight: 294.3

Source: Semi-synthetic Purity: >98% by HPLC



Puromycin dihydrochloride

Code No.: BIA-P1221 Pack Sizes: 25 mg, 100 mg

Puromycin dihydrochloride is a salt of puromycin, a nucleoside antibiotic isolated from Streptomyces alboniger in the 1950s as an anti-trypansomal agent with antibiotic activity. While the salt shares the same pharmacological properties as puromycin free base, its greater water solubility offers advantages in some in vitro applications. Physicochemical properties and chromatographic behaviour will depend on whether the pH is buffered. In non-pH controlled systems, the free base and salt may behave differently.

CAS Number: 58-58-2
Molecular Formula: C₂₂H₃₁Cl₂N₇O₅
Molecular Weight: 544.4

Source: Streptomyces alboniger

Purity: >98% by HPLC

Pyoluteorin

Code No.: BIA-P1393 Pack Sizes: 1 mg, 5 mg

Pyoluteorin is a small chlorinated pyrrol produced by several species of Pseudomonas, first reported in 1958. Pyoluteorin has a broad bioprofile, demonstrating antibiotic, antifungal and herbicidal activity. More recently, pyoluteorin has been investigated as a bio-pesticide and has been shown to modulate the levels of metabolites in Pseudomonas.

CAS Number: 25683-07-2 Molecular Formula: $C_{11}H_7Cl_2NO_3$ Molecular Weight: 272.1

Source: Pseudomonas fluorescens

Purity: >98% by HPLC

Pyrenophorol

Code No.: BIA-P1407 Pack Sizes: 0.5 mg, 2.5 mg

Pyrenophorol is a simple macrocyclic dilactone produced by a number of species of pathogenic fungi, including Byssochlamys, Stenphyllum, Alternaria and Drechslera, first reported in the late 1960s. Pyrenophorol exhibits antibiotic, herbicidal and anthelmintic properties, and is a weak inhibitor of propyl endopeptidases. Pyrenophorol inhibits seed germination but once the seed is germinated, pyrenophlorol enhances root development but causes abnormal chlorophyll retention in leaf sections.

CAS Number: 22248-41-5 Molecular Formula: $C_{16}H_{24}O_6$ Molecular Weight: 312.4

Source: Unidentified fungus
Purity: >95% by HPLC

Pyridomycin

Code No.: BIA-P1556 Pack Sizes: 0.5 mg, 2.5 mg

Pyridomycin is a potent antibiotic active against mycobacteria and some Gram negative bacteria, originally isolated from Streptomyces abidoflavus by Umezawa group at the NIH Japan in 1953, and since isolated from different species and published under several names. The unusual 12-membered macrocyclic depsipeptide comprises three unique sub-units incorporating two substituted pyridines. Pyridomycin is thought to target NADH-dependent enoyl (acyl-carrier-protein) reductase InhA. Recent reports of activity against isoniazid-resistant mycobacteria has seen pyridomycin identified as a potential lead for new generation antibiotics.

CAS Number: 18791-21-4 Molecular Formula: $C_{27}H_{32}N_4O_8$ Molecular Weight: 540.6

Source: Streptomyces sp. Purity: >95% by HPLC

Pyrocoll

Code No.: BIA-P1588 Pack Sizes: 1 mg, 5 mg

Pyrocoll is a small secondary metabolite formed by the dimerisation of pyrrole-2-carboxylic acid and produced by many Streptomyces species. Pyrocoll is an important dereplication standard in discovery, displaying a highly distinctive UV spectrum. The biological activity of pyrocoll has received little attention.

CAS Number: 484-73-1 Molecular Formula: $C_{10}N_6N_2O_2$ Molecular Weight: 186.2

Source: Streptomyces sp. Purity: >95% by HPLC

Pyrrole-2-carboxylic acid

Code No.: BIA-P1572 Pack Sizes: 5 mg, 25 mg

Pyrrole-2-carboxylic acid is small amphoteric polar metabolite produced by many Streptomyces species, often co-produced with its dimer, pyrocoll. Pyrrole-2-carboxylic acid is an important dereplication standard in discovery, displaying a distinctive UV spectrum and a broad range of biological activities, albeit weak. More recently, pyrrole-2-carboxylic has demonstrated antiparasitic activity against Trypanosomes by selective proline racemase inhibition and has potent antifungal activity against Phytophthora.

CAS Number: 634-97-9 Molecular Formula: $C_5H_5NO_2$ Molecular Weight: 111.1

Source: Streptomyces sp. Purity: >95% by HPLC



Quadrone

Code No.: BIA-Q1428 Pack Sizes: 0.5 mg, 2.5 mg

HHH

Quadrone is an unusual sesquiterpene metabolite isolated from Aspergillus terreus and first reported in 1978. Quadrone exhibits antitumor activity but has not been extensively investigated.

CAS Number: 66550-08-1 Molecular Formula: $C_{15}H_{20}O_3$ Molecular Weight: 248.3

Source: Unidentified fungus
Purity: >98% by HPLC

Questiomycin A

Code No.: BIA-Q1525 Pack Sizes: 1 mg, 5 mg

Questiomycin A is a phenoxazine produced by several Streptomyces species and some fungi and bacteria. Questiomycin A is weakly active against bacteria, fungi, plants and tumor cell lines, and inhibits aromatase and sulfatases. Questiomycin, like other phenoxazines, stimulates cell growth and turnover in vitro, an activity possibly related to their ability to form stable free radicals. More recently, questiomycin A has been shown to inhibit pulmonary metastasis caused by mouse melanoma cells. Questiomycin A and related phenoxazines are important dereplication standards in discovery research to eliminate leads due to high amounts of weakly potent actives.

CAS Number: 1916-59-2 Molecular Formula: $C_{12}H_8N_2O_2$ Molecular Weight: 212.2

Source: Unidentified fungus
Purity: >98% by HPLC

Quinaldopeptin

Code No.: **BIA-Q1072** Pack Sizes: **0.5 mg, 2.5 mg**

Quinaldopeptin is a symmetrical, cyclic decapeptide from an Amycolatopsis sp. that is a bis-intercalator of DNA, exhibiting strong in vitro antimicrobial and cytotoxic activity. Quinaldopeptin significantly prolongs the survival time of mice inoculated with a murine tumor, and also shows weak nematocidal activity. Quinaldopeptin is related to the luzopeptins and sandramycin.

 $\begin{array}{lll} \text{CAS Number:} & 130743\text{-}07\text{-}6 \\ \text{Molecular Formula:} & C_{62}H_{76}N_{14}O_{14} \\ \text{Molecular Weight:} & 1243.4 \\ \end{array}$

Source: *Amycolatopsis* sp. Purity: >95% by HPLC

Quinolactacin A1

Code No.: BIA-Q1073 Pack Sizes: 1 mg, 5 mg

Quinolactacin A1 is the dominant analogue of a family of quinolone metabolites produced by Penicillium citrinum. Quinolactacin A1 rapidly epimerises to equilibrate with its diastereomer quinolactacin A2 in protic solvents. The mixture has been shown to inhibit acetylcholinesterase and TNF production.

CAS Number: 815576-68-2 Molecular Formula: $C_{16}H_{18}N_2O_2$ Molecular Weight: 270.3

Source: *Penicillium citrinum* Purity: >95% by HPLC

Quinomycin A

Code No.: BIA-Q1102 Pack Sizes: 1 mg, 5 mg

Quinomycin A is a cyclic depsipeptide metabolite. Quinomycin A has broad activity against bacteria, fungi and viruses, and has found application as an antitumor agent. Quinomycin A acts by bifunctional intercalation of nucleic acids. Recent research has shown quinomycin A to be an extremely potent inhibitor of hypoxia-inducible factor-1 (HIF-1). This transcription factor plays an essential role in tumor progression and metastasis.

CAS Number: 512-64-1 Molecular Formula: $C_{51}H_{64}N_{12}O_{12}S_2$ Molecular Weight: 1101.3

Source: Streptomyces sp. Purity: >99% by HPLC

Quinupristin mesylate

Code No.: BIA-Q1354 Pack Sizes: 1 mg, 5 mg

Quinupristin is a semi-synthetic analogue of virginiamycin B (ostreogrycin B, pristinamycin IA, streptogramin B) formed by a Mannich condensation and elimination to generate an exocyclic methylene alpha to the ketone of the 4-piperidinone. Addition of quinucidinylthiol to the methylene group affords quinupristin. The structural changes provide a more hydrophobic compound with a readily ionisable group for generating a salt. Quinupristin is used commercially in synergistic combination with dalfopristin (30:70). There is little published data on the synthesis, biological or antibiotic activity of quinupristin alone, however the combination product is highly effective, including activity against antibiotic resistant strains.



CAS Number: 120138-50-3 Molecular Formula: $C_{55}H_{75}N_9O_{16}S_3$ Molecular Weight: 1214.4 Source: Semi-synthetic Purity: >98% by HPLC

Quinupristin-Dalfopristin mesylate complex

Code No.: BIA-Q1388 Pack Sizes: 5 mg, 25 mg

Quinupristin-dalfopristin mesylate complex is a 70:30 (w/w) complex of two semi-synthetic analogues marketed as Synercid. Dalfopristin is a semisynthetic analogue of virginiamycin M, while quinupristin is a semi-synthetic analogue of virginiamycin B. To optimise stability, the compounds are presented as the mesylate salts with 10% sodium mesylate excess to provide a buffered aqueous solution. The complex is more hydrophobic than the naturally-occurring virginiamycin complex, with a readily ionisable group for generating a salt for improved solubility. There is little published data on the synthesis and biological activity of individual components of the complex, however the combination is a highly effective antibiotic, including activity against resistant strains.

CAS Number: 126602-89-9

 $\label{eq:molecular} \mbox{Molecular Formula:} \quad C_{55} \mbox{H}_{75} \mbox{N}_9 \mbox{O}_{63} \mbox{S}_3 \mbox{ (for quinupristin mesylate);}$

C₃₅H₅₄N₄O₁₂S₂ (for dalfopristin mesylate)

Molecular Weight: 1214.4, 787.0 Source: Semi-synthetic

Source: Semi-synthetic Purity: >98% by HPLC

Radicicol

Code No.: BIA-R1148 Pack Sizes: 1 mg, 5 mg

Radicicol is a resorcylic acid lactone, produced by several fungal species, that exhibits broad spectrum antifungal and antitumor activity. Radicicol has been the subject of extensive investigation and inhibits protein tyrosine kinase, induces the differentiation of HL-60 cells into macrophages, blocks cell cycle at G1 and G2, suppresses NIH 3T3 cell transformation by diverse oncogenes such as src, ras and mos, and also suppresses the expression of mitogen-inducible cyclooxygenase-2. As a cell differentiation modulator, radicicol has anti-angiogenic activity in vivo, inhibiting the proliferation of plasminogen activator production by vascular endothelial cells.

CAS Number: 12772-57-5 Molecular Formula: $C_{18}H_{17}CIO_6$ Molecular Weight: 364.8

Source: Unidentified fungus
Purity: >99% by HPLC

Ramoplanin complex

Code No.: BIA-R1375 Pack Sizes: 5 mg, 25 mg

Ramoplanin is a complex of three high molecular weight glycolipodepsipeptides, varying in the chain length and shape of the dieneone lipid side-chain. Ramoplanin was isolated in the early 1980s as the major metabolite of a strain of Actinoplanes with antiviral and antibiotic activity against drug resistant Gram positive isolates. Ramoplanin acts by inhibiting cell wall biosynthesis via a different mechanism from the vancomycin-related glycopeptides.

CAS Number: 76168-82-6

 $\label{eq:molecular-formula: C119} \mbox{Molecular Formula: } \mbox{C_{119}H$}_{154}\mbox{CIN}_{21}\mbox{O}_{40} \mbox{ (for A2)}$

Molecular Weight: 2554.1

Source: Actinoplanes sp. Purity: >95% by HPLC

Rapamycin

Code No.: BIA-R1183 Pack Sizes: 25 mg, 100 mg

Rapamycin is a triene macrolide discovered in 1974 as a metabolite of Streptomyces hygroscopicus found in a soil obtained on Rapa Nui (Easter Island). Rapamycin displayed potent and selective antifungal activity, notably against Candida albicans. Interest in the metabolite waned until the structural relationship to the potent immunosuppressant fujimycin (Antibiotic FK506) was recognised in the mid-1980s. This recognition led to the re-discovery of rapamycin as highly selective antitumor immunosuppressant. Rapamycin inhibits the activity of the protein, mTOR (mammalian target of rapamycin) which functions in a signalling pathway to promote tumor growth. Rapamycin binds to a receptor protein (FKBP12). The rapamycin/FKBP12 complex then binds to mTOR and prevents interaction of mTOR with target proteins in this signalling pathway.

CAS Number: 53123-88-9 Molecular Formula: $C_{51}H_{79}NO_{13}$ Molecular Weight: 914.2

Source: Streptomyces hygroscopicus

Purity: >99% by HPLC



Rebeccamycin

Code No.: BIA-R1075 Pack Sizes: 0.5 mg, 2.5 mg

Rebeccamycin is an indolocarbazole isolated from Lechevalieria aerocolonigenes. Rebeccamycin displays selective antitumor activity against several cell lines. Rebeccamycin's primary mechanism of action is via strong DNA intercalation resulting in the potent catalytic inhibition of both topoisomerases I and II. Analogues of rebeccamycin have been tested in clinical trials for cancer therapy.

 $\begin{array}{ll} \text{CAS Number:} & 93908\text{-}02\text{-}2 \\ \text{Molecular Formula:} & C_{27}H_{21}\text{Cl}_2N_3O_7 \end{array}$

Molecular Weight: 570.4

Source: *Lechevalieria* sp. Purity: >99% by HPLC

Resistoflavine

Code No.: BIA-R1192 Pack Sizes: 1 mg, 5 mg

Resistoflavine is a rare, boat-shaped, pentacyclic polyketide isolated from several species of Streptomyces, often co-produced with resistomycin. Resistoflavine exhibits weak antibacterial activity against Gram positive and Gram negative bacteria and exhibits potent cytotoxic activity against tumor cell lines in vitro. Resistoflavine inhibits growth, and nucleic acid and protein synthesis in Bacillus subtilis.

CAS Number: 29706-96-5 Molecular Formula: $C_{22}H_{16}O_7$ Molecular Weight: 392.4

Source: Streptomyces sp. Purity: >98% by HPLC

Resistomycin

Code No.: BIA-R1076 Pack Sizes: 1 mg, 5 mg

Resistomycin is a tetrahydroxyanthrone that has been independently isolated by several groups and reported to have a broad range of biological activities. Resistomycin is active against bacteria, including mycobacteria, and viruses. Resistomycin induces apoptosis and inhibits RNA polymerase.

CAS Number: 20004-62-0 Molecular Formula: $C_{22}H_{16}O_{6}$ Molecular Weight: 376.4

Source: Streptomyces sp. Purity: >95% by HPLC

Retapamulin

Code No.: BIA-R1491 Pack Sizes: 1 mg, 5 mg

Retapamulin is a semi-synthetic pleuromutilin prepared by reacting pleuromutilin tosylate with tropine-3-thiol to give a more hydrophobic analogue with a tertiary amine. This enables formulation as a stable hydrochloride salt. Retapamulin is a broad spectrum antibiotic with no cross resistance to existing antibiotic classes, and is the first pleuromutilin approved for human use. Like all the pleuromutilins, retapamulin inhibits protein synthesis by binding to domain V of 23S rRNA.

CAS Number: 224452-66-8
Molecular Formula: C₃₀H₄₇NO₄S
Molecular Weight: 517.8
Source: Semi-synthet

Source: Semi-synthetic Purity: >99% by HPLC

Reticulol

Code No.: BIA-R1077 Pack Sizes: 1 mg, 5 mg

Reticulol is an isocoumarin metabolite produced by selected species of Streptomyces. Reticulol was first described as a potent inhibitor of cyclic nucleotide phosphodiesterase but more recent research has demonstrated a topoisomerase I inactivation mechanism. Reticulol also causes dose dependent inhibition of lung metastasis in the B16F10 melanoma model.

CAS Number: 26246-41-3 Molecular Formula: $C_{11}H_{10}O_5$ Molecular Weight: 222.2

Source: Streptomyces sp. Purity: >95% by HPLC

Reveromycin A

Code No.: BIA-R1078 Pack Sizes: 0.25 mg, 1 mg

Reveromycin A, the dominant analogue of a complex of spiroketals isolated from a Streptomyces sp., is an inhibitor of the mitogenic activity of EGF. Reveromycin A is a G1 phase cell cycle inhibitor, selectively inhibiting isoleucyl-tRNA synthetase. Reveromycin A displays antiproliferative behaviour against human cell lines KB and K562, as well as potent antifungal activity. More recently it has been shown to induce apoptosis in osteoclasts thus inhibiting bone resorption.

CAS Number: 134615-37-5 Molecular Formula: $C_{36}H_{52}O_{11}$ Molecular Weight: 660.8

Source: Streptomyces sp. Purity: >99% by HPLC



Reveromycin B

Code No.: BIA-R1079 Pack Sizes: 0.25 mg, 1 mg

Reveromycin B is an analogue of reveromycin A formed by rearrangement of the 6:6 spiroketal to a 5:6 spiroketal. Lacking much of the biological activity of reveromycin A, reveromycin B is a useful negative control in resolving the mode of action of this class.

CAS Number: 144860-68-4 Molecular Formula: $C_{36}H_{52}O_{11}$ Molecular Weight: 660.8

Source: Streptomyces sp. Purity: >98% by HPLC

Reveromycin C

Code No.: BIA-R1080 Pack Sizes: 0.25 mg, 1 mg

Reveromycin C is a minor analogue of the reveromycin complex isolated from a Streptomyces sp. Published information suggests that reveromycin C exhibits comparable potency to reveromycin A, its butyl homologue.

CAS Number: 144860-69-5 Molecular Formula: $C_{37}H_{54}O_{11}$ Molecular Weight: 674.8

Source: Streptomyces sp. Purity: >95% by HPLC

Reveromycin D

Code No.: BIA-R1081 Pack Sizes: 0.25 mg, 1 mg

Reveromycin D is the isopentyl analogue and a minor component of the reveromycin complex, isolated from a Streptomyces sp. Published information on reveromycin D suggests that it is more active than its straight chain analogue, reveromycin C.

CAS Number: 144860-70-8 Molecular Formula: $C_{37}H_{54}O_{11}$ Molecular Weight: 674.8

Source: Streptomyces sp. Purity: >95% by HPLC

Ridaforolimus

Code No.: BIA-R1450 Pack Sizes: 1 mg, 5 mg

Ridaforolimus is a semisynthetic macrocyclic lactone prepared from rapamycin by selective alkylation of the 42-hydroxy group with a dimethylphosphinate moiety. Like all tacrolimus analogues, ridaforolimus binds to receptor protein, FKBP12. The complex then binds to mTOR preventing its interaction with target proteins. Ridaforolimus is extensively cited in the literature with over 70 citations.

CAS Number: 572924-54-0 Molecular Formula: $C_{53}H_{84}NO_{14}P$ Molecular Weight: 990.2

Source: Streptomyces hygroscopicus

Purity: >95% by HPLC

Ristocetin A sulfate

Code No.: BIA-R1113 Pack Sizes: 10 mg, 100 mg

Ristocetin A sulfate is a potent antibacterial glycopeptide antibiotic that was withdrawn from clinical use following a high incidence of thrombocytopenia. Further investigation found that ristocetin A induced platelet aggregation by binding to a factor absent in people suffering from von Willebrand's disease, leading to the use of ristocetin A as an important diagnostic aid.

 $\begin{array}{lll} \text{CAS Number:} & 11140\text{-}99\text{-}1 \\ \text{Molecular Formula:} & C_{95}\text{H}_{112}\text{N}_8\text{O}_{48}\text{S} \\ \text{Molecular Weight:} & 2166.0 \\ \end{array}$

Source: *Amycolatopsis* sp. Purity: >95% by HPLC



RK-682

Code No.: BIA-R1082 Pack Sizes: 0.5 mg, 2.5 mg

HO Call O

RK-682 is a dimeric calcium complex of the major analogue of a tetronic acid complex isolated from Streptomyces. Although reported by researchers at RIKEN in 1995, subsequent synthesis in 2001 showed that RK-682 was in fact the calcium complex formed during silica chromatography. Confusion about the structure of RK-682 has lead to the monomeric sub-unit, TAN 1364B (3-hexadecanoyl-5-hydroxymethyltetronic acid) being misnamed as RK-682 by many suppliers. As either the dimer or monomer, RK-682 inhibits protein tyrosine phosphatases, phospoholipase A2, heparinase and HIV-1 protease. However, is unclear whether biological activity is due to the monomer (TAN 1364B) or dimeric complex (RK-682).

CAS Number: 332131-32-5 Molecular Formula: $C_{42}H_{70}CaO_{10}$ Molecular Weight: 775.1

Source: Streptomyces sp. Purity: >95% by HPLC

Rolitetracycline

Code No.: BIA-R1460 Pack Sizes: 5 mg, 25 mg

HO H N(CH₃)₂
OH O OH O O

Rolitetracycline, launched in the late 1950s, was the first of the semi-synthetic tetracyclines. Rolitetracycline is formed by a Mannich condensation of formaldehyde and pyrrolidine with tetracycline. Rolitetracycline is a pro-drug of tetracycline, in which the pyrrolidine moiety improves bioavailability compared with tetracycline. Rolitetracycline has broad spectrum Gram positive activity in vivo, but pH instability limits use to parenteral administration. The intrinsic in vitro activity and SARs for this region of the tetracycline molecule have not been extensively investigated.

CAS Number: 751-97-3 Molecular Formula: $C_{27}H_{33}N_3O_8$ Molecular Weight: 527.6 Source: Semi-synthetic Purity: >98% by HPLC

Roquefortine C

Code No.: BIA-R1083 Pack Sizes: 0.5 mg, 2.5 mg

H O NH

Roquefortine C is a potent tremorgenic mycotoxin originally isolated from Penicillium roqueforti in 1975 in Japan. Parallel research by Scott and colleagues lead to the structure elucidation

of roquefortine C as an unusual diketopiperazine formed by coupling a prenylated tryptophan and histidine. Roquefortine C was subsequently found to be produced by a diverse range of fungi, most notably Penicillium species. Roquefortine is an important mycotoxin as low levels can be found in foodstuffs.

CAS Number: 58735-64-1 Molecular Formula: $C_{22}H_{23}N_5O_2$ Molecular Weight: 389.5

Source: Unidentified fungus
Purity: >99% by HPLC

Roquefortine E

Code No.: **BIA-R1105** Pack Sizes: **1 mg, 5 mg**

Roquefortine E is an analogue of Roquefortine C, containing an additional isoprenyl unit on the imidazole similar to phenylhistin, a recently described antimitotic agent. Roquefortine E is a selective, albeit weakly active, antitumor agent.

CAS Number: 871982-52-4 Molecular Formula: $C_{27}H_{31}N_5O_2$ Molecular Weight: 457.6

Source: *Gymnoascus reesii* Purity: >95% by HPLC

Roseoflavin

Code No.: BIA-R1535 Pack Sizes: 1 mg, 5 mg

Roseoflavin is an antibacterial pigment isolated from Streptomyces davawensis as an anti-metabolite of riboflavin. Roseoflavin is used as a substrate to mimic riboflavin in flavin biosynthesis, but leading to the formation of inactive flavin co-factors. More recently, roseoflavin has been shown to be an important regulator of bacterial gene expression by binding to untranslated regions of RNA, so-called ribo-switching sites.

CAS Number: 51093-55-1 Molecular Formula: $C_{18}H_{23}N_5O_6$ Molecular Weight: 405.4

Source: Streptomyces sp. Purity: >98% by HPLC

Roxithromycin

Code No.: BIA-R1315 Pack Sizes: 5 mg, 25 mg

Roxithromycin was one of the new generation erythromycins introduced in the 1980s. Improved acid stability was achieved by converting the 9-keto group to the more stable oxime and alkylation of the oxime to provide the methoxyethoxymethyl ether oxime. In vivo, roxithromycin exhibits higher tissue levels and a longer half-life while being slightly less potent than erythromycin in vitro.

CAS Number: 80214-83-1 Molecular Formula: $C_{41}H_{76}N_2O_{15}$ Molecular Weight: 837.1 Source: Semi-synthetic Purity: >98% by HPLC

(-)-Rugulosin

Code No.: BIA-R1452 Pack Sizes: 1 mg, 5 mg

(-)-Rugulosin is the less common optical isomer of the mycotoxin, (+)-rugulosin, which was first isolated from Myrothecium verrucaria in 1968. The isomers appear not to be co-produced but both occur widely in several fungal genera. (-)-Rugulosin has been shown to be antiviral. (-)Rugulosin is the less studied of the isomers and its role as a mycotoxin is implied rather than established. There are few comparative studies of the relative potency of the isomers.

CAS Number: 21884-45-7 Molecular Formula: $C_{30}H_{22}O_{10}$ Molecular Weight: 542.5 Source: Penicillium sp.

Purity: >98% by HPLC

(+)-Rugulosin

Code No.: BIA-R1201 Pack Sizes: 1 mg, 5 mg

(+)-Rugulosin is an intense yellow pigment produced by some species of Penicillium, Aspergillus and the fungal symbiotants of some lichens. (+)-Rugulosin shows antibacterial and insecticidal activity and has found application as a bioinsecticide, notably as the active secondary metabolite in endophytic fungi of seedlings.

CAS Number: 23537-16-8 Molecular Formula: $C_{30}H_{22}O_{10}$ Molecular Weight: 542.5 Source: Penicillium sp. Purity: >98% by HPLC

Rugulotrosin A

Code No.: BIA-R1453 Pack Sizes: 1 mg, 5 mg

Rugulotrosin A is a symmetric dimer isolated from an uncharacterised species of Penicillium. Rugulotrosin A displays significant antibacterial activity against a wide range of Gram positive bacteria, but has received no further investigation.

CAS Number: 685135-81-3 Molecular Formula: $C_{32}H_{30}O_{14}$ Molecular Weight: 638.6 Source: Penicillium sp. Purity: >98% by HPLC

Saccharocarcin A

Code No.: BIA-S1134 Pack Sizes: 0.5 mg, 2.5 mg

Saccharocarcin A is an unusual tetronic acid structurally related to kijanimicin, chlorothricin, tetrocarcin and versipelostatin, which has pronounced activity against Gram positive bacteria and Chlamydia trachomatis. Limited availability has restricted further investigation of this metabolite, however several members of this class have received considerable literature focus. Versipelostatin inhibits transcription from the promoter of GRP78, a gene that is activated as part of a stress signalling pathway under glucose deprivation resulting in unfolded protein response (UPR), causing death of glucose-deprived cells. Tetrocarcin A appears to target the phosphatidylinositide-3'-kinase/Akt signalling pathway.

CAS Number: 158475-32-2 Molecular Formula: $C_{67}H_{101}NO_{20}$ Molecular Weight: 1240.5

Source: Amycolatopsis sp. Purity: >95% by HPLC

Saccharocarcin B

Code No.: BIA-S1135 Pack Sizes: 0.5 mg, 2.5 mg

Saccharocarcin B is an unusual tetronic acid structurally related to kijanimicin, chlorothricin, tetrocarcins and versipelostatin, which has pronounced activity against Gram positive bacteria and Chlamydia trachomatis. Limited availability has restricted further investigation of this metabolite, however several members of this class have received considerable literature focus. Versipelostatin inhibits transcription from the promoter of GRP78, a gene that is activated as part of a stress signalling pathway under glucose deprivation resulting in unfolded protein response (UPR), causing death of glucose-deprived cells. Tetrocarcin A appears to target the phosphatidylinositide-3'-kinase/Akt signalling pathway.



CAS Number: 158475-33-3 Molecular Formula: $C_{68}H_{103}NO_{20}$ Molecular Weight: 1254.6

Source: *Amycolatopsis* sp. Purity: >99% by HPLC

Salinomycin

Code No.: BIA-S1307 Pack Sizes: 5 mg, 25 mg

OH OHO OH

Salinomycin is a polyether ionophore with broad spectrum Gram positive and anti-coccidial activity. Salinomycin has a high affinity for monovalent cations, particularly potassium. Salinomycin is used to control coccidia in animals and for growth promotion in ruminants. Recently, salinomycin has been shown to inhibit cancer stem cells and is >100 times more potent than taxol. While the mechanism of action is unknown, it was noted that among the 60,000 compounds screened, another monovalent ionophore, nigericin, and a chloride channel inhibitor, avermectin, were also active.

CAS Number: 53003-10-4 Molecular Formula: $C_{42}H_{70}O_{11}$ Molecular Weight: 751.0

Source: Streptomyces sp. Purity: >98% by HPLC

Salinomycin sodium

Code No.: BIA-S1540 Pack Sizes: 5 mg, 25 mg

OH OHO OHO OH

Salinomycin sodium is prepared from salinomycin taking advantage of the acidic carboxylic acid which ionises and readily forms the salt in sodium hydroxide solutions. The sodium salt is the preferred formulation in animals to prevent coccidiosis and to promote growth. Salinomycin has a high affinity for monovalent cations, particularly potassium. Recently, salinomycin has been shown to inhibit cancer stem cells.

CAS Number: 55721-31-8 Molecular Formula: $C_{42}H_{69}NaO_{11}$ Molecular Weight: 773.0

Source: Streptomyces sp. Purity: >98% by HPLC

Sancycline hydrochloride

Code No.: BIA-S1534 Pack Sizes: 1 mg, 5 mg

H₃C, CH₃ M'-H CF H H OH OH O OH O OH Sancycline hydrochloride is the hydrochloride salt of a rare semi-synthetic tetracycline prepared by hydrogenolysis of the chloro and benzylic hydroxy moieties of declomycin, first reported in 1962. As the simplest of the early tetracyclines, sancycline was the first to be totally synthesised by Conover and co-workers. Like other tetracyclines, sancycline acts by reversibly binding to the 30S ribosomal subunit and inhibiting protein translation by blocking entry of aminoacyl-tRNA into the ribosome A site.

CAS Number: 6625-20-3 Molecular Formula: $C_{21}H_{23}CIN_2O_7$ Molecular Weight: 450.9 Source: Semi-synthetic Purity: >98% by HPLC

Sandramycin

Code No.: BIA-S1211 Pack Sizes: 1 mg, 5 mg

Sandramycin is a high molecular weight, symmetric, cyclic depsipeptide belonging to the quinomycin class produced by Kribbella sp. Sandramycin has potent antitumor and antibacterial activity, and is thought to act by bis-intercalation of DNA.

CAS Number: 100940-65-6 Molecular Formula: $C_{60}H_{76}N_{12}O_{16}$ Molecular Weight: 1221.3 Source: Kribbella sp. Purity: >95% by HPLC

Sartorypyrone A



Code No.: BIA-S1636 Pack Sizes: 1 mg, 5 mg

Sartorypyrone A is a meroterpenoid metabolite first isolated from several species of Neosartorya in Thailand. Unlike previously reported meroterpenoids, sartorypyrone B and aszonapyrone A and B which are polycyclic, sartorypyrone A has a terminal pyrone and cyclohexane separated by a nine carbon chain. Sartorypyrone A is active against Gram negative species, E. coli, and P. aeruginosa, and Gram positive S. aureus resistant strains, and inhibits biofilm formation by S. aureus and B. subtilis.

CAS Number: 1452396-10-9 Molecular Formula: $C_{28}H_{40}O_5$ Molecular Weight: 456.6

Source: *Neosartorya* sp. Purity: >95% by HPLC

Sch 38519

Code No.: BIA-S1292 Pack Sizes: 0.5 mg, 2.5 mg



Sch 38519 is an isochromanequinone, structurally related to lactoquinomycin. Sch 38519 inhibits thrombin-induced aggregation of human platelets and is active against Gram positive and Gram negative bacteria.

CAS Number: 114970-20-6 Molecular Formula: C24H25NO8 Molecular Weight: 455.4

Streptomyces sp. Source: Purity: >95% by HPLC

Sch 725674

Code No.: BIA-S1293 Pack Sizes: 1 mg, 5 mg

Sch 725674 is a macrocyclic lactone structurally related to produced gloeosporone, self-germination inhibitor Colletotrichum gloeosporioides. Sch 725674 is reported to exhibit moderate antifungal activity but has not been extensively investigated.

CAS Number: 877061-66-0 Molecular Formula: $C_{18}H_{32}O_5$ Molecular Weight: 328.5

Source: Colletotrichum sp. Purity: >95% by HPLC

Sclerotigenin



Code No.: BIA-S1678 Pack Sizes: 1 mg, 5 mg

Sclerotigenin is a benzodiazepine isolated from the sclerotia of Penicillium sclerotigenum by Gloer and co-workers at the USDA and University of Iowa, USA in 1999 as an anti-insectan active against the caterpillar, Helicoverpa zea. Structurally, sclerotigenin forms the 7-membered diazepine by coupling two anthranilic acid moieties with glycine. Sclerotigenin is the simplest member of the fungal benzodiazepines which include asperlicins, benzomalvins and circumdatins. Sclerotigenin is an important metabolite for the chemotaxonomy of the genus Penicillium.

65641-84-1 CAS Number: Molecular Formula: $C_{16}H_{11}N_3O_2$ Molecular Weight: 277.3 Penicillium sp. Source: >95% by HPLC

Selamectin

Purity:

Code No.: BIA-S1530 Pack Sizes: 1 mg, 5 mg

Selamectin is a semi-synthetic avermectin derivative prepared by selective hydrolysis and oximation of doramectin. Selamectin is a potent nematocide used for the treatment of endo- and exoparasites of domestic animals, notably cats and dogs. Like the other milbemycin/avermectins, selamectin selectively binds to parasite glutamate-gated chloride ion channels and disrupts neurotransmission leading to paralysis and death of the parasite.

CAS Number: 220119-17-5 Molecular Formula: $C_{43}H_{63}NO_{11}$ Molecular Weight: 770.0 Semi-synthetic Source: >99% by HPLC Purity:

Setomimycin

Code No.: **BIA-S1611** Pack Sizes: 1 mg, 5 mg



Setomimycin is a rare 9,9'-bianthryl antibiotic first isolated from a strain of Streptomyces pseudovenezuelae by Omura and colleagues at the Kitasato Institute, Japan, in 1978. Setomimycin is active against Gram positive bacteria, including mycobacteria, and has antitumor activity both in vitro and in vivo. Limited access has restricted further research on this metabolite.

CAS Number: 69431-87-4 Molecular Formula: $C_{34}H_{28}O_{9}$ 580.6 Molecular Weight:

Source: Streptomyces sp. Purity: >95% by HPLC

Setosusin

Code No.: **BIA-S1084** Pack Sizes: 0.5 mg, 2.5 mg

Setosusin is an unusual bis-spiro metabolite originally isolated from Corynascus setosus. There is little published information on the biological profile of this metabolite.

CAS Number: 182926-45-0 Molecular Formula: C29H38O8 Molecular Weight:

Aspergillus fumigatus Source: Purity: >99% by HPLC

Siccanin

Code No.: **BIA-S1421** Pack Sizes: 1 mg, 5 mg

Siccanin is an unusual fused phenolic pentacycle first isolated from Helminthosporium siccans and reported in 1962 as a potent



antifungal agent. Siccanin inhibits succinate dehydrogenase in the terminal electron transport system. More recent studies note the proximity of the siccanin binding site to the quinone-binding site of the enzyme. Species-selective inhibition by siccanin is unique among succinate dehydrogenase inhibitors and offers a lead for new chemotherapeutics.

CAS Number: 22733-60-4 Molecular Formula: $C_{22}H_{30}O_3$ Molecular Weight: 342.5

Source: Streptomyces sp. Purity: >98% by HPLC

Simvastatin

Code No.: BIA-S1276 Pack Sizes: 25 mg, 100 mg

Simvastatin is semi-synthetic, slightly more hydrophobic analogue of lovastatin. Like lovastatin, simvastatin is a specific inhibitor of HMG-CoA reductase and is used therapeutically to reduce LDL cholesterol. More recently, the statins have become important biochemical probes in cell biology. Their involvement in many events can be correlated to their primary mode of action, however, the mechanism of action of many other effects is less apparent.

CAS Number: 79902-63-9 Molecular Formula: $C_{25}H_{38}O_5$ Molecular Weight: 418.6

Source: Semi-synthetic Purity: >98% by HPLC

Sinapic acid

NEW

Code No.: BIA-S1730 Pack Sizes: 5 mg, 25 mg

Sinapic acid is a common plant metabolite biosynthetically formed by degradation of lignin and lignocellulose. Sinapic acid is a member of the phenylpropanoid class of lignin biosynthetic precursors. The biochemical and pharmacological activity of sinapic acid has > 4,000 SciFinder entries and the area is well reviewed by Guzman (2014) and Sharma (2011). Sinapic acid is a useful standard for analytical and bioassay dereplication as a metabolite commonly encountered in microbial fermentations.

CAS Number: 530-59-6Molecular Formula: $C_{11}H_{12}O_5$ Molecular Weight: 224.2Source: Synthetic
Purity: >95% by HPLC

Sinefungin

Code No.: **BIA-S1376** Pack Sizes: **0.5 mg, 2.5 mg**

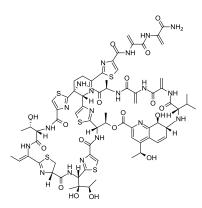
Sinefungin, a polar nucleoside antifungal active with broad biological activity, was isolated from a number of species of Streptomyces in the early 1970s. Sinefungin acts by inhibiting a wide range of methyltransferases, including the methylation of bases in DNA and RNA which alters cytosine deamination and gene expression. Sinefungin is widely used as a bioprobe to block methyltransferase-dependent pathways.

CAS Number: 58944-73-3 Molecular Formula: $C_{15}H_{23}N_7O_5$ Molecular Weight: 381.4

Source: Streptomyces sp. Purity: >95% by HPLC

Siomycin A

Code No.: BIA-S1136 Pack Sizes: 0.5 mg, 2.5 mg



Siomycin is a macrocyclic antibiotic with potent and selective antibacterial activity discovered in 1969. Siomycin is a potent inhibitor of the oncogenic transcription factor, FoxM1. The reduced transcription activity is reflected in the down regulation of protein and mRNA levels of FoxM1 and effects on down stream genes, Cdc25B, survivin and CENPB. In vitro, siomycin inhibits FoxM1-induced cell growth on soft agar and selectively kills transformed but not normal cells.

CAS Number: 12656-09-6

Molecular Formula: C₇₁H₈₁N₁₉O₁₈S₅

Molecular Weight: 1648.9

Source: Streptomyces sp. Purity: >95% by HPLC

Skyrin



Code No.: **BIA-S1662** Pack Sizes: **0.5 mg, 2.5 mg**

Skyrin is a bright orange mycotoxin pigment first reported from Penicillium islandicum but since reported in a broad cross-section of fungal genera and lichens. Its name is derived from skyr, an Icelandic bacterial soured milk, a mouldy sample of which provided the Sopp type strain of P. islandicum. Skyrin is a bisanthraquinone which degrades to two molecules of emodin on treatment with sodium dithionite. Its structure was resolved by Shibata and coworkers in 1955. Skyrin is an important metabolite for the detection of mycotoxins.



CAS Number: 602-06-2 Molecular Formula: $C_{30}H_{18}O_{10}$ Molecular Weight: 538.5

Source: *Phanerochaete* sp. Purity: >95% by HPLC

Spinosyn A

Code No.: BIA-S1337 Pack Sizes: 1 mg, 5 mg

OCH₃

Spinosyn A is the major component of a complex of unusual, hydrophobic macrocyclic lactones isolated from Saccharopolyspora spinosa in 1991. The 12-membered macrocyclic lactone is fused to form a rare 12-5-6-5 tetracyclic ring system, with the macrocycle and the terminal cyclopentane bearing glycosides. Spinosyn A is a potent insecticide for crop pathogens and ectoparasite control on animals. The spinosyns have a unique mechanism of action involving disruption of nicotinic acetylcholine receptors.

CAS Number: 131929-60-7 Molecular Formula: $C_{41}H_{65}NO_{10}$ Molecular Weight: 732.0

Source: Saccharopolyspora spinosa

Purity: >99% by HPLC

Spinosyn A 17-pseudoaglycone

Code No.: BIA-S1593 Pack Sizes: 1 mg, 5 mg

OH H OCH3

Spinosyn A 17-pseudoaglycone is an acid degradation product produced by selective hydrolysis of the more labile forosamine saccharide in the 17-position of spinosyn A, the major component of the commercial product, Spinosad. Spinosyn A 17-pseudoaglycone is only weakly active as an insecticide as the forosamine moiety is considered essential for potent activity. Despite the importance of spinosyns as agro-chemical insecticides and more recently as animal health products, there are few published reports of the biological activity or the levels of spinosyn A 17-pseudoaglycone in animals or in the environment.

CAS Number: 131929-68-5 Molecular Formula: $C_{33}H_{50}O_{9}$ Molecular Weight: 590.7

Source: Semi-synthetic Purity: >95% by HPLC

Spinosyn A aglycone

Code No.: BIA-S1595 Pack Sizes: 1 mg, 5 mg

O H H H OH

Spinosyn A aglycone is an acid degradation product produced by hydrolysis of both saccharide groups on spinosyn A, the major component of the commercial insecticide, spinosad. Spinosyn A aglycone is only weakly active as an insecticide as the saccharides are considered essential for potent activity. Despite the importance of spinosyns as agro-chemical insecticides and more recently as animal health products, there are few published reports of the biological activity or the levels of spinosyn A aglycone in animals or in the environment.

CAS Number: 149560-97-4 Molecular Formula: $C_{24}H_{34}O_5$ Molecular Weight: 402.5 Source: Semi-synthetic Purity: >95% by HPLC

Spinosyn D

Code No.: BIA-S1338 Pack Sizes: 1 mg, 5 mg

Spinosyn D is the second most abundant component (comprising up to 15%) of the spinosyn fermentation complex of macrocyclic lactones. Spinosyn D is a more hydrophobic analogue, and is a potent insecticide for crop pathogens and ectoparasite control on animals, albeit less active than spinosyn A. The spinosyns have a unique mechanism of action involving disruption of nicotinic acetylcholine receptors.

CAS Number: 131929-63-0 Molecular Formula: $C_{42}H_{67}NO_{10}$ Molecular Weight: 746.0

Source: Saccharopolyspora spinosa

Purity: >99% by HPLC

Spinosyn D 17-pseudoaglycone

Code No.: **BIA-S1594** Pack Sizes: **0.5 mg, 2.5 mg**

Spinosyn D 17-pseudoaglycone is an acid degradation product produced by selective hydrolysis of the more labile forosamine saccharide in the 17-position in spinosyn D, the minor component of commercial product, Spinosad. Spinosyn D 17-pseudoaglycone is only weakly active as an insecticide as the forosamine moiety is considered essential for potent activity. Despite the importance of spinosyns as agro-chemical insecticides and more recently as animal health products, there are few published reports of the biological activity or the levels of spinosyn D 17-pseudoaglycone in animals or in the environment.

CAS Number: 131929-55-0 Molecular Formula: $C_{34}H_{52}O_{9}$ Molecular Weight: 604.8

Source: Semi-synthetic
Purity: >95% by HPLC

Spinosyn D aglycone

Code No.: BIA-S1596 Pack Sizes: 0.5 mg, 2.5 mg

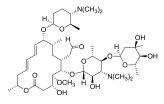
Spinosyn D aglycone is an acid degradation product produced by hydrolysis of both saccharide groups on spinosyn D, the minor component of the commercial insecticide, Spinosad. Spinosyn D aglycone is only weakly active as an insecticide as the saccharides are considered essential for potent activity. Despite the importance of spinosyns as agro-chemical insecticides and more recently as animal health products, there are few published reports of the biological activity or the levels of spinosyn D aglycone in animals or in the environment.

CAS Number: 149439-79-2 Molecular Formula: $C_{25}H_{36}O_5$ Molecular Weight: 416.6

Source: Semi-synthetic Purity: >95% by HPLC

Spiramycin I

Code No.: BIA-S1317 Pack Sizes: 5 mg, 25 mg



Spiramycin I (foromacidin A) is the major analogue of a complex of 16-membered macrocyclic lactones produced by S. ambofaciens and S. spiramyceticus that have broad spectrum antibiotic activity. Spiramycins are unusual among the macrocyclic lactones in that they contain two basic sugars. Spiramycin complex has been used in both human and animal health but its use has not been widespread.

CAS Number: 8025-81-8 Molecular Formula: $C_{43}H_{74}N_2O_{14}$ Molecular Weight: 843.1

Source: Streptomyces ambofaciens

Purity: >99% by HPLC

Spirohexenolide A

NEW

Code No.: BIA-S1698 Pack Sizes: 0.1 mg, 0.5 mg

HO...

Spirohexenolide A is a spirotetronate isolated from Streptomyces platensis by Burkart and co-workers in 2013 as a potent antitumor agent. The original strain of S. platensis did not produce spirohexenolide A but the metabolite emerged on subsequent mutagenesis and media optimisation. Spirohexenolide A is a previously unknown tetracyclic metabolite with a 15-membered

macrocyclic tetronic acid, most closely related to the 13-membered macrocyclic tetronic acids, tetromycins A and B. Spirohexenolide A was recently reported to modulate the action of human macrophage migration inhibitor factor (hMIF).

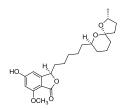
CAS Number: 1193347-22-6 Molecular Formula: $C_{25}H_{28}O_5$ Molecular Weight: 408.5

Source: Streptomyces sp. Purity: >95% by HPLC

Spirolaxine



Code No.: BIA-S1692 Pack Sizes: 0.5 mg, 2.5 mg



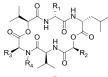
Spirolaxine is the major metabolite isolated from the white wood rot fungus, Sporotrichum laxum, reported by Arnone and coworkers in 1990. The absolute stereochemistry of spirolaxine was solved by researchers at CNR-ICRM, Italy in 2005. Spirolaxine follows a common biosynthetic route to phanerosporic acid but undergoes a series of hydroxylation, cyclisation and methylation steps. Spirolaxine is a potent antibacterial, specifically against Helicobacter pylori.

CAS Number: 126382-01-2 Molecular Formula: $C_{23}H_{32}O_6$ Molecular Weight: 404.5

Source: *Phanerochaete* sp. Purity: >95% by HPLC

Sporidesmolide complex

Code No.: BIA-S1602 Pack Sizes: 5 mg, 25 mg



Sporidesmolide is a family of five closely related cyclic depsipeptides produced by Pithomyces chartarum, the pathogen responsible for facial eczema in sheep, first reported by Russell and colleagues at CSIR in New Zealand in 1961. Sporidesmolide complex contains three dominant components, I, II and V, with lesser quantities of the more polar III and only traces of sporidesmolide IV. The biological activity of the sporidesmolides has not been reported in the literature.

CAS Number: 11113-90-9

Molecular Formula: $C_{34}H_{60}N_4O_8$ (for sporidesmolide II)

Molecular Weight: 652.9
Source: Pithomyces sp.
Purity: >95% by HPLC



Sporidesmolide I

Code No.: BIA-S1603 Pack Sizes: 0.5 mg, 2.5 mg

Sporidesmolide I is the most polar of N-methyl analogues belonging the hexadepsipeptide sporidesmolide Biosynthesis of sporidesmolide I involves the use of D- and Lamino acids utilising two leucine and four valine sub-units, where two of the valines are converted to the corresponding valic acid. The biological activity of sporidesmolide I has not been extensively investigated.

CAS Number: 2900-38-1 C₃₃H₅₈N₄O₈ Molecular Formula: Molecular Weight: 638.8 Source:

Pithomyces sp. >95% by HPLC Purity:

Sporidesmolide II

Code No.: BIA-S1604 Pack Sizes: 0.5 mg, 2.5 mg

Sporidesmolide II is the most abundant of N-methyl analogues belonging to the hexadepsipeptide sporidesmolide complex. Biosynthesis of sporidesmolide II involves the use of D- and Lamino acids utilising D-alloisoleucine, leucine and four valine subunits, where two of the valines are converted to the corresponding valic acid. The biological activity of sporidesmolide II has not been extensively investigated.

3200-75-7 CAS Number: Molecular Formula: C34H60N4O8 Molecular Weight: 652.9 Pithomyces sp. Source:

Purity: >95% by HPLC

Sporidesmolide III

Code No.: BIA-S1605 Pack Sizes: 0.5 mg, 2.5 mg

Sporidesmolide III is the only non-N-methylated analogue of the hexadepsipeptide sporidesmolide complex, eluting in advance of the more abundant N-methyl analogues on reverse phase HPLC. Sporidesmolide III is the demethyl analogue of sporidesmolide I and is thus comprised of D- and L- amino acids utilising two leucine and four valine sub-units, where two of the valines are converted to the corresponding valic acid. The biological activity of sporidesmolide III has not been extensively investigated. CAS Number: 1803-67-4 Molecular Formula: C32H56N4O8 Molecular Weight: 624.8

Source: Pithomyces sp. Purity: >95% by HPLC

Sporidesmolide V

Code No.: BIA-S1622 Pack Sizes: 0.5 mg, 2.5 mg

Sporidesmolide V is the most non-polar of the N-methyl analogues belonging the hexadepsipeptide sporidesmolide Biosynthesis of sporidesmolide V involves the use of D- and Lamino acids utilising alloisoleucine, isoleucine, leucine, and two valine sub-units, where one of the valines and a leucine are converted to the corresponding valic acid. The biological activity of sporidesmolide V has not been extensively investigated.

CAS Number: 127072-57-5 Molecular Formula: $C_{35}H_{62}N_4O_8$ Molecular Weight: 666.9 Source: Pithomyces sp.

Purity: >95% by HPLC

Stachybotrylactam

Code No.: BIA-S1085 Pack Sizes: 0.5 mg, 2.5 mg

Stachybotrylactam is an unusual spirodihydrobenzofuranlactam mycotoxin isolated from a Stachybotrys sp. that has immunosuppressant and weak HIV protease activity. Members of this structural class show diverse activity including antiviral, endothelin and pancreatic cholesterase inhibition.

CAS Number: 163391-76-2 Molecular Formula: C23H31NO4 385.5 Molecular Weight:

Source: Stachybotrys sp. Purity: >95% by HPLC

Stauprimide

Code No.: BIA-S1226 Pack Sizes: 0.5 mg, 2.5 mg

Stauprimide is a semi-synthetic analogue of the staurosporine family of indolocarbazoles. Stauprimide was first published in 1994 as part of an extensive structure-activity investigation to improve the selective inhibition of protein kinase C as potential antitumor agents. Stauprimide increases the efficiency of the directed differentiation of mouse and human embryonic stem cells in synergy with defined extracellular signalling cues. Stauprimide interacts with NME2 (PUF) transcription factor to down-regulate c-Myc expression, leading to differentiation of stem cells.

 $\begin{array}{lll} \text{CAS Number:} & 154589\text{-}96\text{-}5 \\ \text{Molecular Formula:} & C_{35}\text{H}_{28}\text{N}_{4}\text{O}_{5} \\ \text{Molecular Weight:} & 584.6 \\ \end{array}$

Source: Streptomyces sp. Purity: >95% by HPLC

Staurosporine

Code No.: BIA-S1086 Pack Sizes: 5 mg, 25 mg

Staurosporine is an unusual indolocarbazole alkaloid produced by a range of actinomycete species. It is a potent antitumor active, inducing apoptosis in a variety of cell lines. Staurosporine is a potent inhibitor of many kinases including protein kinase C, tyrosine kinase, CDK2/cyclin A and CDK4/cyclin D. At submicromolar concentrations, staurosporine inhibits both IKKalpha and IKKbeta.

 $\begin{array}{lll} \text{CAS Number:} & 62996\text{-}74\text{-}1 \\ \text{Molecular Formula:} & C_{28}H_{26}N_4O_3 \\ \text{Molecular Weight:} & 466.5 \end{array}$

Source: Streptomyces sp. Purity: >99% by HPLC

Steffimycin B

Code No.: BIA-S1087 Pack Sizes: 1 mg, 5 mg

Steffimycin B is an anthracycline metabolite isolated from a Streptomyces sp. with antibacterial and antineoplastic properties. Crystallographic studies of binding to DNA suggest that it has a higher CpG base sequence specificity over the TpA step, similar to that of daunorubicin and nogalamycin. A close analogue was shown to be active against ras oncogene-expressed cells.

CAS Number: 54526-94-2 Molecular Formula: $C_{29}H_{32}O_{13}$ Molecular Weight: 588.6

Source: Streptomyces sp. Purity: >99% by HPLC

Sterigmatocystin

Code No.: BIA-S1213 Pack Sizes: 1 mg, 5 mg

Sterigmatocystin is a xanthone produced by several species of Aspergillus, isolated by a number of research groups in the 1950s as a mycotoxin associated with food and grain contamination. Sterigmatocystin is structurally related to the aflatoxins and, while it is considered to be mutagenic, teratogenic and carcinogenic, it is less widespread and potent than the aflatoxins. Sterigmatocystin, in the presence of microsomes, covalently binds to DNA. It uncouples oxidative phosphorylation but, unlike the aflatoxins, does not induce mitochondrial swelling or hinder Ca2+-induced swelling of mitochondria. Sterigmatocystin also inhibits acyl-CoA:cholesterol acyltransferase (ACAT) with selectivity for the ACAT2 isoenzyme.

CAS Number: 10048-13-2 Molecular Formula: $C_{18}H_{12}O_6$ Molecular Weight: 324.3

Source: Aspergillus versicolor
Purity: >95% by HPLC

Stictic acid



Code No.: **BIA-S1673** Pack Sizes: **0.5 mg, 2.5 mg**

Stictic acid is a β -orcinol depsidone found in a broad range of lichen species. Stictic acid was first isolated and reported by Knop and Schnedermann in 1846, then later isolated as scopularic acid by Zopf in 1907. In the 1930s Asahina and co-workers and Curd and Robertson independently recognised the synonymy. Stictic acid is an important standard in the chemotaxonomy of lichens. Stictic acid exhibits a broad range of pharmacology and has been reported to have antioxidant, antimicrobial, insect anti-feedant and antitumor activities.

CAS Number: 549-06-4 Molecular Formula: $C_{19}H_{14}O_{9}$ Molecular Weight: 386.3

Source: Xanthoparmelia sp. Purity: >95% by HPLC

Streptonigrin

Code No.: BIA-S1107 Pack Sizes: 1 mg, 5 mg

Streptonigrin is an unusual aminoquinone with broad biological activity against bacteria, fungi, nematodes, viruses and tumor cells. Streptonigrin acts as a bioreductive agent, highly dependent



on interactions with metal ions, notably iron, and plays an important role in free radical production through redox cycling of NAD(P)H:quinone oxidoreductase (NQO1).

CAS Number: 3930-19-6 Molecular Formula: $C_{25}H_{22}N_4O_8$ Molecular Weight: 506.5

Source: Streptomyces sp. Purity: >95% by HPLC

Streptozotocin

Code No.: BIA-S1186 Pack Sizes: 25 mg, 100 mg

Streptozotocin is an unusual aminoglycoside containing a nitrosoamino group produced by Streptomyces achromogenes and discovered in 1959 as an antibiotic. The nitrosoamino group enables the metabolite to act as a nitric oxide (NO) donor. NO is an important messenger molecule involved in many physiological and pathological processes in the body. Streptozotocin is also widely used to induce diabetes in rodent models by inhibition of β -cell O-GlcNAcase.

CAS Number: 18883-66-4 Molecular Formula: C₈H₁₅N₃O₇ Molecular Weight: 265.2

Source: Streptomyces achromogenes

Purity: >99% by HPLC

Sulbactam sodium

Code No.: BIA-S1565 Pack Sizes: 5 mg, 25 mg

Sulbactam sodium is a semi-synthetic penem antibiotic formed by the oxidation of penicillanic acid to its sulfone and was invented by Barth at Pfizer in 1978. Sulbactam sodium is a weak antibiotic but its action as an irreversible inhibitor of β -lactamase is exploited to block the degradation of other penicillin derivatives. Sulbactam acts as a synergist with cephalosporins and penicillins against Gram positive bacteria and is used commercially in combination with ampicillin.

CAS Number: 68373-14-8 Molecular Formula: $C_8H_{10}NNaO_5S$ Molecular Weight: 255.2

Source: Semi-synthetic Purity: >95% by HPLC

Sulochrin

Code No.: BIA-S1089 Pack Sizes: 1 mg, 5 mg

Sulochrin is a fungal metabolite isolated from a number of Aspergillus and Penicillium sp. An anti-angiogenic agent, sulochrin inhibits VEGF leading to inhibition of capillary-like tube formation of human umbilical vein endothelial cells. Sulochrin also inhibits eosinophil activation and chemotaxis.

CAS Number: 519-57-3 Molecular Formula: $C_{17}H_{16}O_7$ Molecular Weight: 332.3

Source: Aspergillus terreus
Purity: >99% by HPLC

Sultriecin

Code No.: **BIA-S1090** Pack Sizes: **0.5 mg, 2.5 mg**

Sultriecin is the dominant analogue in a family of triene antibiotics originally thought to be sulfate esters, but recently unequivocally proven to be phosphate esters. While re-naming of the compound as 'phostriecin' may cause confusion with 'fostriecin', it is now recognised that sultriecin is a phosphate ester of fostriecin. Sultriecin displays potent antifungal and antitumor activity.

CAS Number: 131774-59-9 Molecular Formula: $C_{23}H_{34}NaO_8P$ Molecular Weight: 492.5 Source: Streptomyces sp. Purity: >98% by HPLC

Tacrolimus

Code No.: BIA-T1184 Pack Sizes: 25 mg, 100 mg

Tacrolimus (fujimycin) was discovered as a potent inhibitor of IL2 production in a targeted search for novel immunosuppressants. Tacrolimus acts by blocking T cell proliferation in vitro by inhibiting the generation of several lymphokines, notably the original target IL-2. Tacrolimus inhibits the activity of FK-506 binding protein, Ca2+-dependent phosphatase and calcineurin, and activates NF-κB through phosphorylation and degradation of IκBa.

 $\begin{array}{lll} \text{CAS Number:} & 104987\text{-}11\text{-}3 \\ \text{Molecular Formula:} & C_{44}H_{69}\text{NO}_{12} \\ \text{Molecular Weight:} & 804.0 \\ \end{array}$

Source: Streptomyces hygroscopicus

Purity: >99% by HPLC

TAN 1364B

Code No.: BIA-T1544 Pack Sizes: 0.5 mg, 2.5 mg



TAN 1364B is the most abundant analogue of a tetronic acid complex isolated from Streptomyces species, first patented by Takeda in 1993 and more formally identified by Ciba Geigy as the sodium salt of 3-hexadecanoyl-5-hydroxymethyltetronic acid. In 1995 researchers at RIKEN reported the isolation of 3-hexadecanoyl-5-hydroxymethyltetronic acid, named as RK-682. Subsequent synthesis in 2001 showed that the RIKEN RK-682 was in fact the calcium complex of TAN 1364B formed as an artefact during silica chromatography. As the complex, salt or free acid, TAN 1364B inhibits protein tyrosine phosphatases, phospoholipase A2, heparinase and HIV-1 protease. However, it is unclear whether biological activity is due to the monomer (TAN 1364B) or dimeric complex (RK-682)

 $\begin{array}{lll} \text{CAS Number:} & 154639\text{-}24\text{-}4 \\ \text{Molecular Formula:} & C_{21}H_{36}O_{5} \\ \text{Molecular Weight:} & 368.5 \end{array}$

Source: Streptomyces sp. Purity: >95% by HPLC

TAN 420C

Code No.: BIA-T1039 Pack Sizes: 0.5 mg, 2.5 mg

TAN 420C is a minor analogue of the herbimycin complex, isolated from Streptomyces hygroscopicus. TAN 420C is the hydroquinone of herbimycin C, and is known to exhibit antitumor activity. TAN 420C converts Rous sarcoma virus-infected rat kidney cells into normal cells.

CAS Number: 91700-91-3 Molecular Formula: $C_{29}H_{42}N_2O_9$ Molecular Weight: 562.7

Source: Streptomyces sp.
Purity: >95% by HPLC

TAN 420E

Code No.: BIA-T1037 Pack Sizes: 0.5 mg, 2.5 mg

TAN 420E is the hydroquinone analogue of herbimycin A. TAN 420E has been patented as an antibacterial, antifungal and antiprotozoan active. The study of TAN 402E has been overshadowed by the more readily accessible quinone. Little is known of the selectively of the hydroquinone's biological profile compared to that of herbimycin A.

CAS Number: 91700-93-5 Molecular Formula: $C_{30}H_{44}N_2O_9$ Molecular Weight: 576.7

Source: Streptomyces sp. Purity: >95% by HPLC

Teicoplanin A2-2

Code No.: BIA-T1509 Pack Sizes: 1 mg, 5 mg

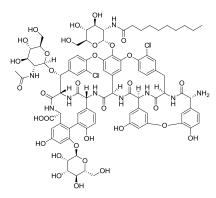
Teicoplanin A2-2 is a major analogue of a family of lipoglycopeptides produced by Actinoplanes teichomyceticus which possesses potent broad spectrum antibiotic activity against Gram positive bacteria, including MRSA and E. faecalis.

CAS Number: 91032-26-7 Molecular Formula: $C_{88}H_{97}Cl_2N_9O_{33}$ Molecular Weight: 1879.7

Source: Actinoplanes sp. Purity: >98% by HPLC

Teicoplanin A2-3

Code No.: BIA-T1510 Pack Sizes: 1 mg, 5 mg



Teicoplanin A2-3 is a major analogue of a family of lipoglycopeptides produced by Actinoplanes teichomyceticus. Teicoplanins possess potent broad spectrum antibiotic activity against Gram positive bacteria, including MRSA and E. faecalis.

CAS Number: 91032-36-9
Molecular Formula: C88H97Cl2N9O33
Molecular Weight: 1879.7

Source: Actinoplanes sp.
Purity: >98% by HPLC



Teicoplanin A2-4

Code No.: BIA-T1511 Pack Sizes: 1 mg, 5 mg

Teicoplanin A2-4 is an analogue of a family of lipoglycopeptides produced by Actinoplanes teichomyceticus. Teicoplanins possess potent broad spectrum antibiotic activity against Gram positive bacteria, including MRSA and E. faecalis.

CAS Number: 91032-37-0 Molecular Formula: $C_{89}H_{99}Cl_2N_9O_{33}$ Molecular Weight: 1893.7

Source: Actinoplanes sp. Purity: >98% by HPLC

Teicoplanin A2-5

Code No.: BIA-T1512 Pack Sizes: 1 mg, 5 mg

Teicoplanin A2-5 is the most non-polar analogue of a family of lipoglycopeptides produced by Actinoplanes teichomyceticus. Teicoplanins possess potent broad spectrum antibiotic activity against Gram positive bacteria, including MRSA and E. faecalis.

 $\begin{array}{lll} \text{CAS Number:} & 91032\text{-}38\text{-}1 \\ \text{Molecular Formula:} & \text{C}_{89}\text{H}_{99}\text{Cl}_2\text{N}_{9}\text{O}_{33} \\ \text{Molecular Weight:} & 1893.7 \\ \end{array}$

Source: Actinoplanes sp. Purity: >98% by HPLC

Teicoplanin A3-1

Code No.: BIA-T1513 Pack Sizes: 1 mg, 5 mg

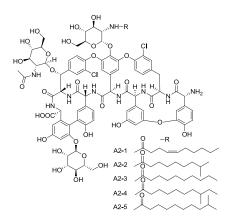
Teicoplanin A3-1 is a minor polar analogue of a family of lipoglycopeptides produced by Actinoplanes teichomyceticus. Teicoplanins possess potent broad spectrum antibiotic activity against Gram positive bacteria, including MRSA and E. faecalis. Teicoplanin A3-1 is the common degradation product of teicoplanins A2-1 to 5, resulting from cleavage of the lipoaminoglycoside substituents.

CAS Number: 93616-27-4 Molecular Formula: $C_{72}H_{68}Cl_2N_8O_{28}$ Molecular Weight: 1564.3

Source: Actinoplanes sp. Purity: >98% by HPLC

Teicoplanin complex

Code No.: BIA-T1187 Pack Sizes: 25 mg, 100 mg



Teicoplanin complex is family of closely related metabolites produced by Actinoplanes teichomyceticus. Teicoplanin complex possesses potent broad spectrum antibiotic activity against Gram positive bacteria, including MRSA and E. faecalis. The metabolites share a common glycopeptide core (teicoplanin A-3) on which a family of fatty acids varying in length, degree of saturation and branching are linked as amides through one of the aminoglycoside moieties. The major component of the complex is teicoplanin A2 which itself has five major components (teicoplanin A2-1 to A2-5) and four minor components (teicoplanin RS-1 to RS-4).

CAS Number: 61036-62-2

Molecular Formula: $C_{88}H_{97}Cl_2N_9O_{33}$ (for A2-2)

Molecular Weight: 1877.7
Source: Actinoplanes sp.
Purity: >95% by HPLC



Teleocidin A1

Code No.: BIA-T1429 Pack Sizes: 1 mg, 5 mg

Teleocidin A is a potent nematocide and acaricide produced by Streptoverticillium strains, first reported in 1960. Teleocidin A is a potent activator of protein kinase C, a tumor promoting agent and an inducer of colony-stimulating factors. More recently, teleocidin A1 has been shown to regulate the expression of several genes. To date, the lack of availability of teleocidin has meant the truncated teleocidin-like (-)indolactam has been used to mimic teleocidin cellular responses.

CAS Number: 70497-14-2 Molecular Formula: $C_{27}H_{39}N_3O_2$ Molecular Weight: 437.7

Source: Streptomyces sp. Purity: >98% by HPLC

Telithromycin

Code No.: BIA-T1316 Pack Sizes: 5 mg, 25 mg

Telithromycin represents the first member of the current generation of erythromycin descendants, belonging to the ketolide class. The ketolides are characterised by the hydrolysis of the cladinose sugar and subsequent oxidation of the alcohol to a ketone. Telithromycin is acid stabile and has good activity against erythromycin-resistant S. aureus, and improved pharmacokinetics.

CAS Number: 191114-48-4 Molecular Formula: $C_{43}H_{65}N_5O_{10}$ Molecular Weight: 812.0 Source: Semi-synthetic Purity: >98% by HPLC

Telomycin

Code No.: BIA-T1179 Pack Sizes: 0.5 mg, 2.5 mg

Telomycin is a complex, high molecular weight depsipeptide discovered in 1958. The structure was not solved until 1968. Telomycin possesses potent and highly selective activity against Gram positive bacteria in vitro and in vivo when given by intramuscular administration. Telomycin is poorly absorbed after oral administration. Despite its structural novelty, telomycin has received little attention.

CAS Number: 19246-24-3 Molecular Formula: $C_{59}H_{77}N_{13}O_{19}$ Molecular Weight: 1272.3 Source: Streptomyces s

Source: Streptomyces sp. Purity: >95% by HPLC

Temsirolimus

Code No.: BIA-T1386 Pack Sizes: 1 mg, 5 mg

Temsirolimus is a semisynthetic macrocyclic lactone prepared from rapamycin by selective acylation of the 42-hydroxy group with a protected bis(dihydromethyl)propionic acid, followed by deprotection. Like all tacrolimus analogues, temsirolimus binds to receptor protein, FKBP12. The complex then binds to mTOR preventing it from interacting with target proteins. Temsirolimus is extensively cited in the literature with over 700 citations.

 $\begin{array}{lll} \text{CAS Number:} & 162635\text{-}04\text{-}3 \\ \text{Molecular Formula:} & C_{56}H_{87}NO_{16} \\ \text{Molecular Weight:} & 1030.3 \\ \end{array}$

Source: Streptomyces hygroscopicus

Purity: >95% by HPLC

Tenellin

Code No.: BIA-T1566 Pack Sizes: 1 mg, 5 mg

Tenellin is a yellow pigment produced by species of the genus Beauveria, isolated and reported by Canadian researchers in 1968. Structure elucidation in 1977 showed that tenellin belongs to the rare 4-hydroxypyridone class containing a dienone side chain. Little has been published on the biological activity of tenellin despite the extensive use of Beauveria species, capable of producing tenellin, as biocontrol agents for agrochemical pests.

CAS Number: 53823-15-7 Molecular Formula: $C_{21}H_{23}NO_5$ Molecular Weight: 369.4 Source: Beauveria sp. Purity: >95% by HPLC



Tenuazonic acid

Code No.: BIA-T1277 Pack Sizes: 1 mg, 5 mg

Tenuazonic acid is potent tetramic acid mycotoxin produced by several fungal genera, notably Alternaria. Tenuazonic acid exhibits antitumor, antiviral and antibacterial activity.

CAS Number: 610-88-8 Molecular Formula: $C_{10}H_{15}NO_3$ Molecular Weight: 197.2 Source: Alternaria sp.

Ternatin

Purity:

Code No.: BIA-T1397 Pack Sizes: 1 mg, 5 mg

>99% by HPLC

Ternatin is a cyclic peptide antifungal metabolite, first isolated from the fungus Didymocladium ternatum in Russia in 1974. More recently, ternatin has been demonstrated to be a potent inhibitor of fat accumulation in 3T3-L1 murine adipocytes. Note that this metabolite should not be confused with the plant flavonoid of the same name.

CAS Number: 148619-41-4 Molecular Formula: $C_{37}H_{67}N_7O_8$ Molecular Weight: 738.0

Source: Unidentified fungus
Purity: >98% by HPLC

Terphenyllin

Code No.: BIA-T1200 Pack Sizes: 1 mg, 5 mg

Terphenyllin is the dominant analogue of a family of polyphenyl fungal metabolites produced by Aspergillus candidus. The occurrence of this metabolite is a criterion in the polyphasic taxonomy of A. candidus. Terphenyllin has not been extensively studied but exhibits anti-oxidative activity, acts as a plant growth inhibitor, and shows weak activity against HIV integrase.

CAS Number: 52452-60-5 Molecular Formula: $C_{20}H_{18}O_5$ Molecular Weight: 338.4

Source: Aspergillus candidus
Purity: >99% by HPLC

Terrecyclic Acid

Code No.: **BIA-T1560** Pack Sizes: **1 mg, 5 mg**

Terrecyclic acid is a sesquiterpene metabolite produced by Aspergillus terreus, first reported by researchers at the Universities of Osaka and Tokyo in 1982. Terrecyclic acid possesses broad spectrum antimicrobial and antitumor activity. Terrecyclic acid induces the heat shock protein response and affects oxidative and inflammatory cellular stress response pathways. No studies of the mode of action of terrecyclic acid have been published.

CAS Number: 83058-94-0 Molecular Formula: $C_{15}H_{20}O_3$ Molecular Weight: 248.3

Source: Aspergillus terreus
Purity: >95% by HPLC

Terreic acid



Code No.: BIA-T1695 Pack Sizes: 1 mg, 5 mg

Terreic acid is a hemiquinone isolated as an antibacterial metabolite by Abraham and Florey in 1949. The stereochemistry of terreic acid was resolved by Miller in 1968. Terreic acid possesses broad Gram positive and Gram negative activity. Terreic acid is biosynthesised from 6-methylsalicylic acid and acts as a covalent inhibitor of the bacterial cell wall biosynthetic enzyme, MurA. Recently, terreic acid has been shown to bind to the acetyltransferase domain of a bifunctional enzyme, N-acetylglucosamine-1-phosphate-uridyltransferase/glucosamine-1-phosphate-acetyltransferase (GlmU), in Escherichia coli.

CAS Number: 121-40-4 Molecular Formula: $C_7H_6O_4$ Molecular Weight: 154.1

Source: Aspergillus terreus
Purity: >95% by HPLC

Terrein

Code No.: BIA-T1408 Pack Sizes: 1 mg, 5 mg

Terrein is a polar, substituted dihydrocyclopentenone first reported by Raistrick and colleagues in the 1930s and subsequently found in a number of Aspergillus and Penicillium species. For many years the biological profile and mode of action of terrein was unstudied; however, recent research showed that terrein reduces melanin synthesis by reducing tyrosinase production via ERK activation, followed by MITF down-regulation. Terrein also reduces human keratinocyte proliferation by inhibiting ERK and by decreasing the expression of cyclin B1 and Cdc2 complex.



CAS Number: 582-46-7 Molecular Formula: $C_8H_{10}O_3$ Molecular Weight: 154.2

Source: Aspergillus sp.
Purity: >95% by HPLC

Tetracycline

Code No.: BIA-T1334 Pack Sizes: 5 mg, 25 mg

Tetracycline is a linear tetracyclic broad spectrum antibiotic first prepared chemically by dechlorination of chlortetracycline and subsequently isolated from several Streptomyces species. Tetracycline has broad spectrum antibacterial and antiprotozoan activity, and acts by binding to the 30S and 50S ribosomal subunits blocking protein synthesis. Tetracycline is a pigment and, like many pigments, is degraded by light, oxygen, trace metal ions and pH variations. The purity of tetracycline is often variable, with significant levels of degradation products.

 $\begin{array}{lll} \text{CAS Number:} & 60\text{-}54\text{-}8 \\ \text{Molecular Formula:} & \text{C}_{22}\text{H}_{24}\text{N}_{2}\text{O}_{8} \\ \text{Molecular Weight:} & 444\text{.}4 \end{array}$

Source: Streptomyces sp. Purity: >98% by HPLC

Tetracycline hydrochloride

Code No.: BIA-T1505 Pack Sizes: 5 mg, 25 mg

Tetracycline hydrochloride is a salt prepared from tetracycline taking advantage of the basic dimethylamino group which protonates and readily forms the salt in hydrochloric acid solutions. The hydrochloride is the preferred formulation for pharmaceutical applications. Tetracycline hydrochloride has broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal sub-units blocking protein synthesis.

CAS Number: 64-75-5 Molecular Formula: $C_{22}H_{25}CIN_2O_8$ Molecular Weight: 480.9

Source: Streptomyces sp. Purity: >99% by HPLC

Tetradecanoyl-L-homoserine lactone

Code No.: BIA-T1499 Pack Sizes: 5 mg, 25 mg

Tetradecanoyl-L-homoserine lactone is an active quorum sensing modulator first recognised in Rhodobacter capsulatus. Tetradecanoyl-L-homoserine lactone and other acylhomoserine lactones have been detected in hundreds of bacterial species and, while the homologues vary between species and strains, the homoserine lactones are the major chemical modulators of within and between cell communication and regulation. The most

significant variable defining the function of the homoserine lactone is the length of the acyl chain, with shorter chains displaying opposing actions to the longer chains.

CAS Number: 202284-87-5
Molecular Formula: C₁₈H₃₃NO₃
Molecular Weight: 311.5
Source: Synthetic
Purity: >99% by HPLC

Tetrahydrolipstatin

Code No.: BIA-T1320 Pack Sizes: 25 mg, 100 mg

Tetrahydrolipstatin (orlistat) is a semi-synthetic derivative of lipstatin, a metabolite isolated from Streptomyces toxytricini. Tetrahydrolipstatin acts as a potent, irreversible inhibitor of pancreatic lipase. In vivo, it blocks the absorption of triglycerides while allowing fatty acid absorption. Tetrahydrolipstatin is widely used for the treatment of obesity.

 $\begin{array}{lll} \text{CAS Number:} & 96829\text{-}58\text{-}2 \\ \text{Molecular Formula:} & C_{29}H_{53}NO_5 \\ \text{Molecular Weight:} & 495.7 \end{array}$

Source: Semi-synthetic Purity: >98% by HPLC

Tetranactin

Code No.: BIA-T1287 Pack Sizes: 1 mg, 5 mg

Tetranactin is a member of the macrotetrolide complex produced by a range of Streptomyces sp. Like the other members of the macrotetrolide family, tetranactin is thought to act as a monovalent cation ionophore with high selectivity for ammonium and potassium. Unlike the other macrotetrolides, tetranactin exhibits potent insecticidal activity.

CAS Number: 33956-61-5 Molecular Formula: C₄₄H₇₂O₁₂ Molecular Weight: 793.0

Source: Streptomyces sp. Purity: >95% by HPLC

Tetromycin A

Code No.: BIA-T1180 Pack Sizes: 0.5 mg, 2.5 mg

Tetromycin A is an unusual tetronic acid, structurally related to kijanimicin, chlorothricin, saccharocarcin, tetrocarcin and versipelostatin. Tetromycin A has pronounced activity against antibiotic susceptible and resistant Gram positive bacteria including MRSA. Limited availability has restricted further investigation of this metabolite in the literature. Several members of this class have received considerable literature focus. Versipelostatin inhibits transcription from the promoter of GRP78, a gene that is activated as part of a stress signalling pathway under glucose deprivation resulting in unfolded protein response (UPR). The UPR-inhibitory action causes selective and massive killing of the glucose-deprived cells. Tetrocarcin A appears to target the phosphatidylinositide-3'-kinase/Akt signalling pathway.

CAS Number: 180027-83-2 Molecular Formula: $C_{36}H_{48}O_{6}$ Molecular Weight: 576.8

Source: Streptomyces sp. Purity: >99% by HPLC

Tetromycin B

Code No.: BIA-T1181 Pack Sizes: 0.5 mg, 2.5 mg

Tetromycin B is an unusual tetronic acid, structurally related to kijanimicin, chlorothricin, saccharocarcin, tetrocarcin and versipelostatin. Tetromycin B has pronounced activity against antibiotic susceptible and resistant Gram positive including MRSA. Limited availability has restricted further investigation of this metabolite in the literature. Several members of this class have received considerable literature focus. Versipelostatin inhibits transcription from the promoter of GRP78, a gene that is activated as part of a stress signalling pathway under glucose deprivation resulting in unfolded protein response (UPR). The UPR-inhibitory action causes selective and massive killing of the glucose-deprived cells. Tetrocarcin A appears to target the phosphatidylinositide-3'-kinase/Akt signalling pathway.

CAS Number: 180027-84-3 Molecular Formula: $C_{34}H_{46}O_{5}$ Molecular Weight: 534.7

Source: Streptomyces sp. Purity: >99% by HPLC

Thiamphenicol

Code No.: BIA-T1486 Pack Sizes: 25 mg, 100 mg

Thiamphenicol is a semi-synthetic chloramphenicol prepared by total synthesis from thiophenol in which the nitro moiety of chloramphenicol is replaced by a methylsulphone, first synthesised at Sterling Winthrop in 1952. Thiamphenicol is a broad spectrum antibiotic with good activity against Gram negative and anaerobic bacteria. Thiamphenicol acts by binding to the 23S sub-unit of the 50S ribosome inhibiting protein synthesis. Thiamphenicol has been extensively studied with over 800 literature citations.

CAS Number: 15318-45-3 Molecular Formula: $C_{12}H_{15}Cl_2NO_5S$ Molecular Weight: 356.2 Source: Synthetic Purity: >99% by HPLC

Thielavin A

Code No.: BIA-T1091 Pack Sizes: 0.5 mg, 2.5 mg

The fungal metabolite, thielavin A, and its relatives are glucose-6-phosphatase inhibitors. The three benzoic acid units are essential for inhibition. Thielavin A was originally isolated as a inhibitor of prostaglandin biosynthesis. The closely related thielavin B is a telomerase and cell wall transglycosylation inhibitor.

CAS Number: 71950-66-8 Molecular Formula: $C_{29}H_{30}O_{10}$ Molecular Weight: 538.5

Source: Unidentified fungus
Purity: >95% by HPLC

Thielavin B

Code No.: BIA-T1092 Pack Sizes: 0.5 mg, 2.5 mg

Thielavin B is a fungal metabolite closely related to thielavin A but reported to have a slightly different biochemical profile. Thielavins inhibit glucose-6-phosphatase. Thielavin B is a potent inhibitor of phospholipase C, and inhibits peptidoglycan formation and prostaglandin biosynthesis.

CAS Number: 71950-67-9 Molecular Formula: $C_{31}H_{34}O_{10}$ Molecular Weight: 566.6

Source: Unidentified fungus
Purity: >95% by HPLC

Thiocillin I

Code No.: BIA-T1529 Pack Sizes: 0.5 mg, 2.5 mg

Thiocillin I is the simplest of the macrocyclic thiazole peptides, first isolated from Bacillus badius. The final structural assignment and total synthesis of thiocillin I was only completed in 2011. Thiocillin I was originally reported as a potent antibacterial but its biological activity has not been extensively investigated.

CAS Number: 59979-01-0 Molecular Formula: $C_{48}H_{49}N_{13}O_{10}S_6$ Molecular Weight: 1160.4 Source: Bacillus sp. Purity: >95% by HPLC



Thiolutin

Code No.: BIA-T1138 Pack Sizes: 1 mg, 5 mg

Thiolutin is an antibiotic first described by Tanner and co-workers in 1950. Resurgent interest in this class of microbial metabolites was stimulated by the discovery of their selective antitumor activity. Thiolutin is a potent inhibitor of bacterial and yeast RNA polymerases, and also inhibits mannan and glucan formation in fungi. Thiolutin suppresses tumor cell-induced angiogenesis in vivo.

CAS Number: 87-11-6 Molecular Formula: $C_8H_8N_2O_2S_2$ Molecular Weight: 228.3

Source: Streptomyces sp. Purity: >98% by HPLC

Thiostrepton

Code No.: BIA-T1158 Pack Sizes: 5 mg, 25 mg

Thiostrepton is a macrocyclic antibiotic incorporating thiazoles and other atypical amino acids. Patented in 1961, thiostrepton has been used as an antibiotic and acts by binding to ribosomes to prevent the binding of the EF-G elongation factor and GTP to the 50S ribosomal subunit. Thiostrepton is an inducer of tipA, a gene that controls the bacterial transcription regulators, and TipAL and TipAS, that are central regulators in multidrug resistance. Thiostrepton is closely related to siomycin, a recently discovered inhibitor of oncogenic transcription factor, FoxM1.

CAS Number: 1393-48-2 Molecular Formula: $C_{72}H_{85}N_{19}O_{18}S_5$ Molecular Weight: 1664.9

Source: Streptomyces sp. Purity: >99% by HPLC

Tiamulin

Code No.: BIA-T1321 Pack Sizes: 25 mg, 100 mg

Tiamulin is a semi–synthetic analogue of pleuromutilin in which the hydroxyacetyl side chain is replaced with a larger diethylaminoethylthioacetyl moiety, providing greater hydrophobicity and an ionisable group for salt formation and greater water solubility. Tiamulin is a potent and highly selective antibiotic active against a range of Gram positive bacteria, with no cross resistance to existing antibiotic classes due to its unique mode of action. Like pleuromutilin, it inhibits protein synthesis by binding to domain V of 23S rRNA.

CAS Number: 55297-95-5
Molecular Formula: C28H47NO4S
Molecular Weight: 493.7
Source: Semi-synthetic
Purity: >98% by HPLC

Tiamulin hydrogen fumarate

Code No.: **BIA-T1322** Pack Sizes: **25 mg, 100 mg**

Tiamulin is a semi–synthetic analogue of pleuromutilin in which the hydroxyacetyl side chain is replaced with a larger diethylaminoethylthioacetyl moiety, providing greater hydrophobicity. The hemi-fumarate provides a stable salt with improved water solubility. Tiamulin is a potent and highly selective antibiotic active against a range of Gram positive bacteria, with no cross resistance to existing antibiotic classes due to its unique mode of action of inhibiting protein synthesis by binding to domain V of 23S rRNA.

CAS Number: 55297-96-6
Molecular Formula: C₃₂H₅₁NO₈S
Molecular Weight: 609.8
Source: Semi-synthe

Source: Semi-synthetic Purity: >98% by HPLC

Tigecycline

Code No.: **BIA-T1371** Pack Sizes: **1 mg, 5 mg**

Tigecycline is a semi-synthetic tetracycline prepared by the introduction of a tert-butylaminoacetamido group into a previously unexplored and unsubstituted region of existing tetracyclines. Like other tetracyclines, tigecycline acts by reversibly binding to the 30S ribosomal subunit and inhibits protein translation by blocking entry of aminoacyl-tRNA into the ribosome A site. The enhanced activity can be attributed to stronger binding affinity, thus minimising the impact of existing mechanisms of resistance. Tigecycline is regarded as the first of a new class of glycylcyline antibiotics. Critical comparison to the tetracycline class appears to be lacking in the literature.

CAS Number: 220620-09-7 Molecular Formula: $C_{29}H_{39}N_5O_8$ Molecular Weight: 585.7 Source: Semi-synthetic Purity: >95% by HPLC



Tildipirosin

Code No.: BIA-T1569 Pack Sizes: 1 mg, 5 mg

Tildiprosin is a semi-synthetic antibiotic derived from a tylosin derivative by iodination and reaction with piperidine. The introduction of a third basic moiety into the tylosin core provides a wider spectrum of antibiotic action than the dibasic analogues such as tilmicosin, in particular good protection against Pasteurella in livestock. Tildipirosin's interaction with the ribosomal site of action differs from that of tylosin and tilmicosin.

CAS Number: 328898-40-4 Molecular Formula: $C_{41}H_{71}N_3O_8$ Molecular Weight: 734.0

Source: Semi-synthetic Purity: >95% by HPLC

Tilmicosin

Code No.: BIA-T1323 Pack Sizes: 25 mg, 100 mg

Tilmicosin is a semi-synthetic antibiotic derived from desmycosin (tylosin B), a minor co-metabolite of tylosin. Tilmicosin is produced by reductive amination of desmycosin. Desmycosin itself is prepared by the partial hydrolysis of tylosin with the loss of the mycarosyl sugar. The piperidinyl group at C20 of tilmicosin provides a wider spectrum of antibiotic action, in particular good protection against Pasteurella in livestock.

CAS Number: 108050-54-0 Molecular Formula: $C_{46}H_{80}N_2O_{13}$ Molecular Weight: 869.2

Source: Semi-synthetic Purity: >98% by HPLC

Tilmicosin phosphate

Code No.: BIA-T1324 Pack Sizes: 25 mg, 100 mg

Tilmicosin phosphate is a salt of the semi-synthetic antibiotic derivative of desmycosin (tylosin B), a minor co-metabolite of tylosin, prepared by mixing the active tilmicosin with phosphoric acid to provide improved solubility and enhanced pharmacokinetics. Tilmicosin is a broad spectrum antibiotic, providing good protection against Pasteurella in livestock.

CAS Number: 137330-13-3

Molecular Formula: C₄₆H₈₃N₂O₁₇P

Molecular Weight: 967.1

Source: Semi-synthetic

Purity: >98% by HPLC

Toxoflavin

Code No.: BIA-T1522 Pack Sizes: 1 mg, 5 mg

Toxoflavin is a distinctive yellow pigment produced by some species of Pseudomonas and Streptomyces. Toxoflavin is one of two toxins produced when a fermented coconut drink, Tempe bonkrek, is contaminated with P. cocovenenans. Toxoflavin (PKF 118-310) is a potent antagonist of Tcf4/ β -catenin signalling, inhibiting the expression of survivin and inducing apoptosis in several tumor cell lines.

CAS Number: 84-82-2 Molecular Formula: $C_7H_7N_5O_2$ Molecular Weight: 193.2

Source: Streptomyces sp. Purity: >98% by HPLC

Toyocamycin

Code No.: BIA-T1310 Pack Sizes: 1 mg, 5 mg

Toyocamycin is a pyrrolopyrimidine nucleoside isolated from Streptomyces toyocaensis in 1956. Toyocamycin, like other members of pyrrolopyrimidine class, is an adenosine nucleotide antimetabolite with a broad spectrum of action against bacteria, fungi, protozoans and mammalian cell lines.

CAS Number: 606-58-6 Molecular Formula: $C_{12}H_{13}N_5O_4$ Molecular Weight: 291.3

Source: Streptomyces sp. Purity: >95% by HPLC

TPU-0037A

Code No.: BIA-T1048 Pack Sizes: 0.5 mg, 2.5 mg

TPU-0037A, a close structural analogue of lydicamycin, has been shown to be highly active against MRSA. TPU-0037A is also closely related to BN 4515N which was isolated from a strain of Microtetraspora as a neuritogenic agent.

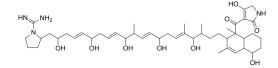
CAS Number: 485815-59-6 Molecular Formula: $C_{46}H_{72}N_4O_{10}$ Molecular Weight: 841.1

Source: Streptomyces sp. Purity: >95% by HPLC



TPU-0037C

Code No.: BIA-T1049 Pack Sizes: 0.5 mg, 2.5 mg



TPU-0037C, a close structural analogue of lydicamycin, has been shown to be highly active against MRSA. TPU-0037C is also closely related to BN 4515N which was isolated from a strain of Microtetraspora as a neuritogenic agent.

CAS Number: 485815-61-0

Molecular Formula: C46H72N4O9

Molecular Weight: 825.1

Source: Streptomyces sp. Purity: >95% by HPLC

Triacetylphloroglucinol

Code No.: BIA-T1390 Pack Sizes: 5 mg, 25 mg

Triacetylphloroglucinol (TAPG) is the most hydrophobic of a small molecular weight phenolic metabolite belonging to the phloroglucinol (1,3,5 trihydroxybenzene) family, produced by bacteria including Pseudomonas strains. TAPG exhibits a broad range of biological activities, albeit with mostly low potency. In the search for novel actives, TAPG and related metabolites are important for dereplication to eliminate leads due to high amounts of weakly potent actives. Although weakly active, this family appears to be important in the biocontrol of plant diseases by some Pseudomonas strains.

CAS Number: 2161-87-7 Molecular Formula: $C_{12}H_{12}O_6$ Molecular Weight: 252.2

Source: Pseudomonas fluorescens

Purity: >98% by HPLC

Trichostatin A

Code No.: BIA-T1108 Pack Sizes: 1 mg, 5 mg

Trichostatin A is a histone deacetylase inhibitor that enhances the cytotoxic efficacy of anticancer drugs that target DNA. Trichostatin A displays antifungal, antiprotozoan and antitumor activity

CAS Number: 58880-19-6 Molecular Formula: $C_{17}H_{22}N_2O_3$ Molecular Weight: 302.4

Source: Streptomyces sp. Purity: >99% by HPLC

Trichostatin C

Code No.: BIA-T1093 Pack Sizes: 0.5 mg, 2.5 mg

Trichostatin C is the first example of a glucopyranosyl hydroxamate from nature. The conjugation may act to protect the less stable N-OH group of Trichostatin A. Trichostatin C displays antifungal, antiprotozoan and antitumor activity, albeit less potent than trichostatin A

CAS Number: 68676-88-0 Molecular Formula: $C_{23}H_{32}N_2O_8$ Molecular Weight: 464.5

Source: Streptomyces sp. Purity: >95% by HPLC

Trinactin

Code No.: BIA-T1094 Pack Sizes: 1 mg, 5 mg

Trinactin is a member of the macrotetrolide complex produced by a range of Streptomyces sp. Early literature reported that trinactin was a monovalent cation ionophore with high selectivity for ammonium and potassium. Trinactin inhibits T-cell proliferation induced by IL-2, and cytokine production at nanomolar levels for IL-2, IL-4, IL-5 and interferon-y. Trinactin has not previously been available for intensive investigation.

CAS Number: 7561-71-9 Molecular Formula: $C_{43}H_{70}O_{12}$ Molecular Weight: 779.0

Source: Streptomyces sp. Purity: >95% by HPLC

TS 155-2

Code No.: BIA-T1291 Pack Sizes: 1 mg, 5 mg

TS155-2 is a macrocyclic lactone related to hygrolidin but produced by a different Streptomyces species. TS155-2 is an inhibitor of calcium entry into the cell induced by thrombin stimulation. With the exception of the original patent suggesting hypotensive, antiplatelet, anti-ischaemic and anti-inflammatory activity, no literature investigation of TS155-2 is available.

CAS Number: 303009-07-6 Molecular Formula: $C_{39}H_{60}O_{11}$ Molecular Weight: 704.9

Source: Streptomyces sp.
Purity: >95% by HPLC



Tubercidin

Code No.: BIA-T1516 Pack Sizes: 1 mg, 5 mg

NH₂

Tubercidin is a nucleoside metabolite first isolated from Streptomyces tubericidus. Tubercidin, like other nucleosides, is a broad spectrum potent chemotherapeutic agent active against viruses, bacteria, fungi, protozoans and tumors. Tubercidin acts on a diverse range of targets, such as RNA processing, nucleic acid and protein synthesis, and acts as a nucleoside mimic of adenosine.

CAS Number: 69-33-0 Molecular Formula: $C_{11}H_{14}N_4O_4$ Molecular Weight: 266.3

Source: Streptomyces sp. Purity: >98% by HPLC

Tubermycin B

Code No.: BIA-T1524 Pack Sizes: 1 mg, 5 mg

O O O H

Tubermycin B (1-phenazinecarboxylic acid) is a simple phenazine produced by several species of Pseudomonas and Actinomycetes. Tubermycin B is a weakly active antibacterial compound that plays a role in the biocontrol of plant diseases by several Pseudomonas strains. Tubermycin B and related phenazines are important dereplication standards in discovery research to eliminate leads due to high amounts of weakly potent actives.

CAS Number: 2538-68-3 Molecular Formula: $C_{13}H_8N_2O_2$ Molecular Weight: 224.2

Source: Pseudomonas aeruginosa

Purity: >98% by HPLC

Tulathromycin

Code No.: BIA-T1370 Pack Sizes: 5 mg, 25 mg

Tulathromycin is a semi-synthetic erythromycin belonging to the ring expanded aza-erythromycins. Ring expansion improves the acid lability compared with the parent erythromycins. Tulathromycin is regarded as the first of the triamilides, having a third amino (propylaminomethylene) group on a sugar to improve absorption. This modification provides a mixture of the two tulathromycin isomers (90:10) present in the commercial animal health product.

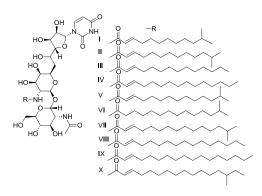
CAS Number: 217500-96-4 Molecular Formula: $C_{41}H_{79}N_3O_{12}$ Molecular Weight: 806.1 Source: Semi-synthetic

Tunicamycin complex

Purity:

Code No.: BIA-T1095 Pack Sizes: 5 mg, 25 mg

>98% by HPLC



The tunicamycins are a family of lipophilic nucleosides with fatty acids conjugated to an aminoglycoside group. The complex comprises the analogues, tunicamycins I to X. This composition is typical of other products less precisely described as tunicamycins A to D. The tunicamycins act by blocking the formation of N-glycoside linkages to proteins via inhibition of formation of dolichol monophosphate from N-acetylglucosamine-1-phosphate. Tunicamycin blocks the synthesis of all N-linked glycoproteins (N-glycans) and causes cell cycle arrest in G1 phase. Tunicamycins are broadly active against prokaryotes, eukaryotes and viruses.

CAS Number: 11089-65-9 Molecular Formula: $C_{38}H_{62}N_4O_{16}$ (for IV)

Molecular Weight: 830.4
Source: Streptomyces sp.

Purity: >99% by HPLC (total complex)

Tylosin

Code No.: BIA-T1549 Pack Sizes: 5 mg, 25 mg

Tylosin is a 16-membered macrocyclic lactone isolated from Streptomyces fradiae in 1961. Tylosin has broad spectrum antibacterial activity and was developed as a veterinary pharmaceutical for treatment of bacterial infections in a range of domestic animals. Tylosin acts by binding to the 50S ribosomal subunit resulting in the inhibition of protein synthesis in bacteria.

CAS Number: 1401-69-0 Molecular Formula: C₄₆H₇₇NO₁₇ Molecular Weight: 916.1

Source: Streptomyces sp. Purity: >99% by HPLC

Tyrocidine complex

Code No.: BIA-T1609 Pack Sizes: 5 mg, 25 mg

Tyrocidine complex is a family of eight cationic cyclic decapeptides produced by Bacillus brevis, first reported by Dubos in 1941. Tyrocidines exhibit broad antibiotic activity against Gram positive and negative bacteria and are the major component of the tyrothricin complex which is used for treatment of topical infections. Although the mechanism of action of tyrocidines is not fully understood, they are known to act by disturbing lipid bilayers of the bacterial cell membrane.

CAS Number: 8011-61-8

Molecular Formula: $C_{66}H_{87}N_{13}O_{13}$ (for Tyrocidine A)

Molecular Weight: 1269.7 Source: Bacillus brevis Purity: >95% by HPLC

Tyrothricin

Code No.: BIA-T1610 Pack Sizes: 25 mg, 100 mg

Tyrothricin is a complex of two unrelated peptide families, gramicidin complex and tyrocidines complex, produced by Bacillus brevis and discovered by Dubos in 1939. Typically, tyrothricin is composed of 20% of the linear pentadecylpeptide gramicidins and 80% of cyclic decapeptide tyrocidines. Both the gramicidins and tyrocidines act by disrupting bacterial cell wall integrity, but by differing mechanisms. Tyrothricin is used clinically for bacterial skin infections in some countries.

CAS Number: 1404-88-2

Molecular Formula: C₆₆H₈₇N₁₃O₁₃ (for Tyrocidine A (80%))

Molecular Weight: 1269.7 Source: Bacillus brevis

Purity: >95% composite purity (based on 80%

tyrocidine and 20% Gramicidin complexes)

UCN-01

Code No.: BIA-U1096 Pack Sizes: 1 mg, 5 mg

UCN-01 is an indolocarbazole isolated from a high staurosporine-producing Streptomyces culture. UCN-01 inhibits protein kinase C (PKC) and cyclin-dependant kinase 2 (CDK2), resulting in accumulation of cells in the G1 phase and induction of apoptosis. UCN-01 also enhances the cytotoxicity of other anti-cancer drugs, such as DNA-damaging agents and anti-metabolite drugs, through putative abrogation of G2 and/or S phase accumulation induced by the latter agents.

CAS Number: 112953-11-4 Molecular Formula: $C_{28}H_{26}N_4O_4$ Molecular Weight: 482.5

Source: Streptomyces sp. Purity: >99% by HPLC

UCN-02

Code No.: BIA-U1097 Pack Sizes: 1 mg, 5 mg

UCN-02 is an indolocarbazole isolated from a high staurosporine-producing Streptomyces culture as a minor co-metabolite. Although less selective than its isomer UCN-01, UCN-02 exhibits comparable activity and probably acts by similar mechanisms.

CAS Number: 121569-61-7 Molecular Formula: $C_{28}H_{26}N_4O_4$ Molecular Weight: 482.5

Source: Streptomyces sp. Purity: >95% by HPLC

UK-1

Code No.: BIA-U1290 Pack Sizes: 1 mg, 5 mg

UK-1 is an unusual bis-benzoxazole metabolite isolated from a species of Streptomyces. UK-1 exhibits good antitumor activity but



is devoid of antimicrobial activity. UK-1 acts as a magnesium ion-dependent DNA binding agent and inhibitor of human topoisomerase II.

 $\begin{array}{lll} \text{CAS Number:} & 151271\text{-}53\text{-}3 \\ \text{Molecular Formula:} & C_{22}\text{H}_{14}\text{N}_{2}\text{O}_{5} \\ \text{Molecular Weight:} & 386.4 \\ \end{array}$

Source: Streptomyces sp. Purity: >95% by HPLC

Umirolimus

Code No.: BIA-U1383 Pack Sizes: 1 mg, 5 mg

Umirolimus is a semi-synthetic macrocyclic lactone prepared from rapamycin by selective alkylation of the 42-hydroxy group, providing one of most hydrophobic tacrolimus analogues. Umirolimus has been targeted for use in stents and medical devices to suppress localised immunoreaction. Like all tacrolimus analogues, umirolimus binds to receptor protein, FKBP12. The complex then binds to mTOR and prevents it from interacting with target proteins. Umirolimus is extensively cited in the literature with over 70 citations.

CAS Number: 851536-75-9 Molecular Formula: $C_{55}H_{87}NO_{14}$ Molecular Weight: 986.3

Source: Streptomyces hygroscopicus

Purity: >95% by HPLC

Unguinol

NEW

Code No.: BIA-U1668 Pack Sizes: 1 mg, 5 mg

Unguinol is a depsidone isolated from Aspergillus unguis by researchers at the USDA in 1972. In the same year, Swedish researchers produced unguinol by fermentation of a strain of A. nidulins in chloride-depleted media. Unguinol exhibits weak antibacterial activity but its pharmacology has not been extensively investigated. A discovery screen of fungal extracts identified unguinol as an inhibitor of C4 plant enzyme pyruvate phosphate dikinase (PPDK), a potent herbicide target.

>95% by HPLC

 $\begin{array}{lll} \text{CAS Number:} & 36587\text{-}59\text{-}4 \\ \text{Molecular Formula:} & C_{19}\text{H}_{18}\text{O}_{5} \\ \text{Molecular Weight:} & 326.3 \\ \text{Source:} & \textit{Aspergillus } \text{sp.} \end{array}$

Purity:

Unguisin A



Code No.: BIA-U1682 Pack Sizes: 1 mg, 5 mg

Unguisin A is a major analogue of a class of cyclic heptapeptides isolated from Emericella unguis (Aspergillus unguis) by Malstrom, University of Copenhagen, Denmark in 1999. Structurally, unguisuin A is comprised of only one proteogenic amino acid, L-phenylalanine with two D-valines, two D-alanines and a D-tryptophan. Uniquely, the macrocycle of the unguisins is annealed to γ -aminobutyric acid. The structure of unguisin A was confirmed by total synthesis in 2011. No reports of pharmacology of unguisin A have appeared in the literature to date.

CAS Number: 226956-06-5 Molecular Formula: $C_{40}H_{54}N_8O_7$ Molecular Weight: 758.9

Source: Aspergillus unguis
Purity: >95% by HPLC

Unguisin B



Code No.: BIA-U1683 Pack Sizes: 0.5 mg, 2.5 mg

Unguisin B is a major analogue of a class of cyclic heptapeptides isolated from Emericella unguis (Aspergillus unguis) by Malstrom, University of Copenhagen, Denmark in 1999. Structurally, unguisuin B is comprised of only one proteogenic amino acid, L-leucine with two D-valines, two D-alanines and a D-tryptophan. Uniquely, the macrocycle of the unguisins is annealed to Y-aminobutyric acid. No reports of pharmacology of unguisin B have appeared in the literature to date.

CAS Number: 226956-07-6 Molecular Formula: $C_{37}H_{56}N_8O_7$ Molecular Weight: 724.9

Source: Aspergillus unguis
Purity: >95% by HPLC

Urocanic acid



Code No.: BIA-U1734 Pack Sizes: 5 mg, 25 mg



Urocanic acid is a cinnamic acid-like compound formed by the decarboxylation of histidine by the enzyme, histidase. Urocanic acid is produced by a number of Bacillus, Streptomyces and other bacteria, but is also broadly found in microbial fermentations. Urocanic acid has weak activity in a diverse range of bioassays and is a useful standard for analytical and bioassay dereplication of crude microbial extracts.

CAS Number: 104-98-3 Molecular Formula: $C_6H_6N_2O_2$ Molecular Weight: 138.1 Source: Synthetic Purity: >95% by HPLC

Usnic acid

Code No.: BIA-U1380 Pack Sizes: 5 mg, 25 mg

Usnic acid is a major metabolite from a number of lichen and fungal species and is perhaps one of the longest known microbial metabolites, first isolated in 1844. Usnic acid exhibits a broad range of biological activity; indeed it is easier to list the bioassays in which it does not exhibit activity. More often than not, potency is low and of limited value. Usnic acid is an important metabolite for dereplication in discovery research programs.

CAS Number: 125-46-2 Molecular Formula: $C_{18}H_{16}O_{7}$ Molecular Weight: 344.3 Source: Usnea sp. Purity: >98% by HPLC

Validamycin A

Code No.: BIA-V1561 Pack Sizes: 5 mg, 25 mg

Validamycin A is the major analogue of a family of cyclitol disaccharides isolated from Streptomyces hygroscopicus var. limoneus by researchers at Takeda in 1970. Although commonly regarded as an aminoglycoside, validamycin shares little in common with conventional aminoglycosides such as streptomycin and gentamicin. Validamycin A is a potent antifungal agent and is used to control fungi in crop production. Validamycin A acts as a potent inhibitor of trehalase, an important enzyme in carbohydrate storage and ultilisation in fungi.

CAS Number: 37248-47-8 Molecular Formula: $C_{20}H_{35}NO_{13}$ Molecular Weight: 497.5

Source: Streptomyces sp. Purity: >95% by HPLC

Valinomycin

Code No.: BIA-V1114 Pack Sizes: 25 mg, 100 mg

Valinomycin is a hydrophobic cyclodepsipeptide with potent antitumor activity. Valinomycin is a highly selective potassium ionophore and this action leads to a diverse range of profound cell membrane effects. More recently, valinomycin has found application as a biosensor to detect potassium efflux.

CAS Number: 2001-95-8 Molecular Formula: $C_{54}H_{90}N_6O_{18}$ Molecular Weight: 1111.3

Source: Streptomyces sp. Purity: >95% by HPLC

Valnemulin

Code No.: BIA-V1492 Pack Sizes: 5 mg, 25 mg

Valnemulin is a semi-synthetic pleuromutilin prepared by sequential reaction of pleuromutilin tosylate with 2-amino-1,1-dimethylethylthiol, coupling the free amine with a protected valine and then deprotection to provide the final product. Valnemulin is a broad spectrum antibiotic used to control gastrointestinal infections in animals and shows no cross resistance to other antibiotic classes. Like all the pleuromutilins, valnemulin inhibits protein synthesis by binding to domain V of 23S RNA.

CAS Number: 101312-92-9 Molecular Formula: $C_{31}H_{52}N_2O_5S$ Molecular Weight: 564.8

Source: Semi-synthetic Purity: >99% by HPLC

Valnemulin hydrochloride

Code No.: BIA-V1537 Pack Sizes: 25 mg, 100 mg

Valnemulin hydrochloride is the salt prepared from valnemulin taking advantage of the basic amino group which protonates and readily forms the salt in hydrochloric acid solutions. The hydrochloride is the preferred formulation for pharmaceutical applications. Valnemulin is a broad spectrum antibiotic used to control gastrointestinal infections in animals, and shows no cross



resistance to other antibiotic classes. Like all the pleuromutilins, valnemulin inhibits protein synthesis by binding to domain V of 23S RNA.

CAS Number: 133868-46-9 Molecular Formula: $C_{31}H_{53}CIN_2O_5S$ Molecular Weight: 601.3

Source: Semi-synthetic Purity: >98% by HPLC

Vancomycin hydrochloride

Code No.: BIA-V1190 Pack Sizes: 25 mg, 100 mg

Vancomycin hydrochloride is the salt of a glycopeptide antibiotic isolated from Amycolatopsis orientalis in 1956. Vancomycin exhibits potent activity against Gram positive bacteria and is highly effective against MRSA in vitro and in vivo. Vancomycin interferes with cell wall synthesis by binding to D-alanine-D-alanine residues.

CAS Number: 1404-93-9 Molecular Formula: $C_{66}H_{76}Cl_3N_9O_{24}$

Molecular Weight: 1485.7

Source: Amycolatopsis orientalis

Purity: >99% by HPLC

Venturicidin A

Code No.: BIA-V1098 Pack Sizes: 1 mg, 5 mg

The macrolide antibiotic, Venturicidin A, isolated from a Streptomyces sp., is a potent inhibitor of mitochondrial ATP synthase complex acting on the F0 membrane sector. Venturicidin A was originally isolated as an antifungal agent.

CAS Number: 33538-71-5 Molecular Formula: $C_{41}H_{67}NO_{11}$ Molecular Weight: 750.0

Source: Streptomyces sp. Purity: >95% by HPLC

Venturicidin B

Code No.: BIA-V1099 Pack Sizes: 0.25 mg, 1 mg

The macrolide antibiotic Venturicidin B, isolated from a Streptomyces sp., is a potent inhibitor of mitochondrial ATP synthase complex acting on the F0 membrane sector. Venturicidin B was originally isolated as an antifungal agent.

CAS Number: 33538-72-6 Molecular Formula: $C_{40}H_{66}O_{10}$ Molecular Weight: 707.0

Source: Streptomyces sp. Purity: >95% by HPLC

Verrucofortine

Code No.: BIA-V1175 Pack Sizes: 5 mg, 25 mg

Verrucofortine is a diketopiperazine alkaloid derived from tryptophan and leucine, isolated from Penicillium species. In vivo, verrucofortine exhibits no apparent toxicity in mice even at high doses. Verrucofortine has not been intensively investigated.

CAS Number: 113706-21-1 Molecular Formula: $C_{24}H_{31}N_3O_3$ Molecular Weight: 409.5 Source: Penicillium sp. Purity: >99% by HPLC

Verruculogen

Code No.: **BIA-V1191** Pack Sizes: **1 mg, 5 mg**

Verruculogen is a tremorgenic mycotoxin, first isolated from Penicillium verruculosum in 1972. The structure was resolved as an indole alkaloid in 1974. Verruculogen is produced by several species of Penicillium and Aspergillus and its presence is a useful taxonomic phenotypic marker. The tremorgenic action of verruculogen is associated with increases in spontaneous glutamate and aspartate release, decreases in GABA levels and, at toxic doses, an increase in the number and decrease in the affinity of DHP receptors in rat cortex. In in vitro guinea pig ileum preparations, verruculogen causes an increase in contractile responses due to electrical field stimulation, attributed to enhancement of acetylcholine from presynaptic nerve terminals. Verruculogen also inhibits Ca²+-activated K+ channels, and is a cell cycle inhibitor blocking division at the M phase.

CAS Number: 12771-72-1 Molecular Formula: $C_{27}H_{33}N_3O_7$ Molecular Weight: 511.6

Source: Aspergillus fumigatus
Purity: >95% by HPLC

Violacein

Code No.: BIA-V1327 Pack Sizes: 1 mg, 5 mg

Violacein is an intense violet pigment formed by the condensation of two tryptophan units, found in a number of bacteria, notably Chromobacterium violaceum. The regulation of pigment biosynthesis is the chromogenic basis for the use of C. violaceum CV26 for the detection of quorum sensing mediators. Violacein exhibits broad spectrum activity against bacteria, protozoans (including malaria), viruses and mammalian cell lines. Violacein cell toxicity resembles TNF-o signal transduction.

CAS Number: 548-54-9 Molecular Formula: $C_{20}H_{13}N_3O_3$ Molecular Weight: 343.3

Source: Chromobacterium violaceum

Purity: >99% by HPLC

Virginiamycin B

Code No.: BIA-V1132 Pack Sizes: 5 mg, 25 mg

Virginiamycin B is a depsipeptide antibiotic co-produced with ostreogrycin A, together used as a synergistic mixture. Virginiamycin B, also known as ostreogrycin B and streptogramin B among other synonyms, was discovered independently and named by several groups, leading to considerable confusion in the literature. Virginiamycin B acts a synergist, binding to the conformational change of the peptidyl transferase centre of the 50S ribosome induced by ostreogrycin A.

CAS Number: 3131-03-1 Molecular Formula: $C_{45}H_{54}N_8O_{10}$ Molecular Weight: 867.0

Source: Streptomyces sp. Purity: >99% by HPLC

Virginiamycin complex

Code No.: BIA-V1188 Pack Sizes: 5 mg, 25 mg

Virginiamycin complex is defined as a mixture of 75% ostreogrycin A (virginiamycin M1) and 25% virginiamycin S1, together with the less abundant S analogues. As the two major components have quite different solubilities, these proportions are not readily achieved or used. BioAustralis has isolated and re-combined the

individual components to provide the defined components of virginiamycin complex. The composition of the complex is important as Virginiamycin S1 acts a synergist, binding to the conformational change of the peptidyl transferase centre of the 50S ribosome induced by ostreogrycin A.

CAS Number: 11006-76-1

Molecular Formula: $C_{28}H_{35}N_3O_7$ (for M1), $C_{43}H_{49}N_7O_{10}$ (for S1)

Molecular Weight: 1349.5

Source: Streptomyces sp.

Purity: >99% by HPLC (75% Virginamycin M1, 20% Virginiamycin S1, 5% Other minor

analogues)

Virginiamycin S1

Code No.: BIA-V1152 Pack Sizes: 5 mg, 25 mg

Virginiamycin S1 is one of a family of depsipeptide antibiotics coproduced with ostreogrycin A and used as a synergistic mixture. Virginiamycin S1, also known as Staphylomycin S and Factor S among other synonyms, was discovered independently and named by several groups, leading to considerable confusion in the literature. Virginiamycin S1 acts a synergist, binding to the conformational change of the peptidyl transferase centre of the 50S ribosome induced by ostreogrycin A. Virginiamycin S1 differs from virginiamycin B in lacking the dimethylamino moiety on the phenyl ring.

CAS Number: 23152-29-6
Molecular Formula: C₄₃H₄₉N₇O₁₀
Molecular Weight: 823.9

Source: Streptomyces sp. Purity: >99% by HPLC

Viridicatin

Code No.: BIA-V1139 Pack Sizes: 1 mg, 5 mg

Viridicatin is a fungal metabolite produced by several species of Penicillium and formed by the rearrangement of the benzodiazepine, cyclopenin. Viridicatin exhibits potent selective activity against Mycobacterium tuberculosis, but is inactive against most other bacteria.

CAS Number: 129-24-8 Molecular Formula: $C_{15}H_{11}NO_2$ Molecular Weight: 237.3 Source: Penicillium

Source: *Penicillium* sp. Purity: >99% by HPLC

Viridicatol



Code No.: BIA-V1681 Pack Sizes: 1 mg, 5 mg



Viridicatol is a polar metabolite first isolated from Penicillium cyclopium and P. viridicatum by Birkinshaw and collaborators in 1963. Viridicatol is a 2,3-dihydroxyquinoline which, like its analogue viridicatin, exists in equilibrium with its keto-tautomer. Viridicatol acts as an anti-inflammatory agent by suppressing the expression of pro-inflammatory mediators such as inducible nitric oxide synthase (iNOS) and cyclooxygenase (COX-2), via inhibition of the nuclear factor-kappa B (NF-kB) pathway in LPS stimulated cells. Further, viridicatol is a selective inhibitor of PTP1B, a potential drug target for the treatment of type 2 diabetes and obesity.

CAS Number: 14484-44-7 Molecular Formula: $C_{15}H_{11}NO_3$ Molecular Weight: 253.3

Source: Undescribed fungus
Purity: >95% by HPLC

Viridicatumtoxin

Code No.: BIA-V1447 Pack Sizes: 1 mg, 5 mg

Viridicatumtoxin is a tetracycline-like metabolite produced by several species of Penicillium, first isolated in 1976 as a mycotoxin. Initial testing revealed that viridicatumtoxin caused myocardial deterioration, renal tubule necrosis and spleen atrophy. Analogous to the related tetracyclines, viridicatumtoxin was found to be a potent antibacterial, with activity against S. aureus including MRSA and QRSA strains. Little has been published on the mode of action of viridicatumtoxin.

CAS Number: 39277-41-3 Molecular Formula: $C_{30}H_{31}NO_{10}$ Molecular Weight: 565.6 Source: Penicillium sp. Purity: >98% by HPLC

Vulpinic acid



Code No.: BIA-V1677 Pack Sizes: 5 mg, 25 mg

OH O OCH₃

Vulpinic acid is the methyl ester of pulvinic acid. It is present in many lichen species and was originally isolated from Letharia vulpine (wolf lichen) in the 19th century with its structure elucidated in the early part of the 20th century. Vulpinic acid

exhibits antibacterial, antitumor, anti-inflammatory and plant growth regulation activity, along with a diverse range of other activities.

CAS Number: 521-52-8Molecular Formula: $C_{19}H_{14}O_{5}$ Molecular Weight: 322.3Source: Letharia sp.
Purity: >95% by HPLC

Wortmannin

Code No.: BIA-W1224 Pack Sizes: 1 mg, 5 mg

Wortmannin is a steroidal metabolite belonging to the viridin group, isolated from Penicillium wortmannii in 1957. The structure was finally solved in 1968. Wortmannin exhibits broad spectrum antifungal activity, together with antitumor and antiinflammatory activity. Wortmannin is a potent inhibitor of phosphoinositide 3-kinase and myosin light chain kinase. Wortmannin also activates neutrophil and formyl-Met-Leu-Phe-mediated phospholipase D, inhibits autophagy, potentiates LPS-induced NO production and induces Alzheimer-like hyperphosphorylation in tau in vivo.

CAS Number: 19545-26-7 Molecular Formula: $C_{23}H_{24}O_8$ Molecular Weight: 428.4

Source: Penicillium wortmannii
Purity: >98% by HPLC

Zaragozic acid A

Code No.: BIA-Z1424 Pack Sizes: 1 mg, 5 mg

Zaragozic acid A is the major metabolite of a class of unusual bicyclic tricarboxylic acids, produced by a number of fungi in the genera Curvularia, Exserohilum, Setosphaeria and others, discovered at Merck and Glaxo in the early 1990s. In nature, zaragozic acid A acts as a broad spectrum antifungal but its mode of action as an inhibitor of squalene synthase, involved in sterol biosynthesis, led to investigation as a cholesterol lowering agent. Zaragozic acid A prepared by BioAustralis is presented as the free acid rather than the tri-sodium salt to avoid stability problems associated with hydrolysis of the salt.

CAS Number: 142561-96-4 Molecular Formula: $C_{35}H_{46}O_{14}$ Molecular Weight: 690.7

Source: Unidentified fungus
Purity: >98% by HPLC



a-Zearalanol

Code No.: BIA-Z1405 Pack Sizes: 5 mg, 25 mg

 $\alpha\textsc{-}{\sc Zearalanol}$ is a minor analogue of the zearalenone family of resorcinyl macrocyclic lactones, produced by several species of Fusarium. Like the other zearalenones, $\alpha\textsc{-}{\sc Zearalanol}$ exhibits estrogenic activity in animals. The potency of $\alpha\textsc{-}{\sc Zearalanol}$, generically known as zeranol, lead to its commercial development as a growth promotant in livestock.

 $\begin{array}{lll} \text{CAS Number:} & 26538\text{-}44\text{-}3 \\ \text{Molecular Formula:} & C_{18}\text{H}_{26}\text{O}_5 \\ \text{Molecular Weight:} & 322.4 \\ \end{array}$

Source: Semi-synthetic Purity: >99% by HPLC

β-Zearalanol

Code No.: BIA-Z1410 Pack Sizes: 1 mg, 5 mg

 $\beta\text{-}Zearalanol$ is a minor analogue of the zearalenone family of resorcinyl macrocyclic lactones, produced by several species of Fusarium. Like the other zearalenones, $\beta\text{-}zearalanol$ exhibits estrogenic activity in animals. $\beta\text{-}Zearalanol$ was investigated as a growth promotant for animals.

CAS Number: 42422-68-4 Molecular Formula: $C_{18}H_{26}O_5$ Molecular Weight: 322.4

Source: Semi-synthetic Purity: >99% by HPLC

Zearalanone

Code No.: BIA-Z1440 Pack Sizes: 1 mg, 5 mg

Zearalanone is a minor component of the zearalenone complex produced by several species of Fusarium. Like the more abundant analogues, zearalanone causes estrogenic effects in domestic livestock. Zearalanone is a metabolite of α -zearalanol, a growth promotant in animals, and is a standard for detection of zearanol-contaminated products and Fusarium-contaminated grains.

CAS Number: 5975-78-0 Molecular Formula: $C_{18}H_{24}O_5$ Molecular Weight: 322.4

Source: Semi-synthetic Purity: >99% by HPLC

a-Zearalenol

Code No.: BIA-Z1141 Pack Sizes: 5 mg, 25 mg

α-Zearalenol is a mycotoxin produced by several species of Fusarium. α-Zearalenol exhibits pronounced estrogenic activity, being 3-fold more active than zearalenone. Contamination of grains, notably maize, by Fusarium species gives rise to high levels of zearalenol and is regarded as an important food quality issue for both human and animal health.

CAS Number: 36455-72-8 Molecular Formula: $C_{18}H_{24}O_5$ Molecular Weight: 320.3 Source: Fusarium sp. Purity: >99% by HPLC

β-Zearalenol

Code No.: BIA-Z1403 Pack Sizes: 1 mg, 5 mg

 $\beta\text{-}Zearalenol$ is a mycotoxin produced by several species of Fusarium. $\beta\text{-}Zearalenol$ exhibits pronounced estrogenic activity, like other zearalenones. Contamination of grains by Fusarium species, notably maize, gives rise to high levels of zearalenol and is regarded as an important food quality issue for both human and animal health.

CAS Number: 71030-11-0 Molecular Formula: $C_{18}H_{24}O_5$ Molecular Weight: 320.3 Source: Fusarium sp. Purity: >99% by HPLC

Zearalenone

Code No.: BIA-Z1142 Pack Sizes: 5 mg, 25 mg

Zearalenone is a resorcylic acid lactone produced by a number of Fusarium sp. Zearalenone acts as a non-steroidal estrogen, binding to estrogen receptor and is uterotropic. Zearalenone induces reproductive problems in animals and, in some animal models, is thought to be a primary initiator of hepatic tumors. In vivo, zearalenone undergoes metabolic reduction to the more estrogenic zearalenol. Contamination of grains, notably maize, by Fusarium species gives rise to high levels of zearalenone and is regarded as an important food quality issue for both human and animal health.

CAS Number: 17924-92-4 Molecular Formula: $C_{18}H_{22}O_5$ Molecular Weight: 318.4 Source: Fusarium sp. Purity: >99% by HPLC

Zotarolimus

Code No.: BIA-Z1387 Pack Sizes: 1 mg, 5 mg

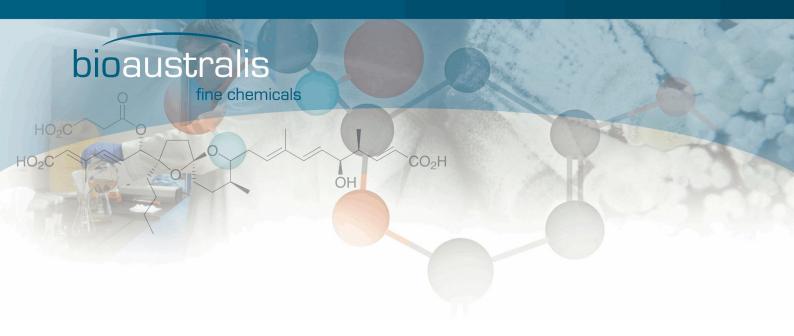
Zotarolimus is a semi-synthetic macrocyclic lactone prepared from rapamycin by preparation of the 42-triflate ester, followed by displacement with tetrazole and purification of the two isomeric products. This structural change affords a less bioavailable product, a preferred profile for some applications. Like all tacrolimus analogues, zotarolimus binds to a receptor protein (FKBP12). The complex then binds to mTOR preventing it from interacting with target proteins. Zotarolimus is extensively cited in the literature with over 200 citations.

CAS Number: 221877-54-9 Molecular Formula: $C_{52}H_{79}N_5O_{12}$ Molecular Weight: 966.2

Source: Streptomyces hygroscopicus

Purity: >95% by HPLC





Index of Product Names & Synonyms

March 2017

Product Name	Synonyms	Code No.
A 39183A	Antibiotic A 39183A	BIA-A1612
A 54556A		BIA-A1570
A 54556B		BIA-A1571
A 83016F		BIA-A1417
Acarbose	Amylostatin J, Bay g 5421, alpha-GHI	BIA-A1231
Acetylaszonalenin	LL-S 490beta	BIA-A1687
N-Acetylhistamine	Acetylhistamine; N-Acetylhistamine; N-Omega-acetylhistamine; NSC 66356; N'-Acetylhistamine	BIA-A1737
Acetyl-L-homoserine lactone	C2-HSL, N-Acetyl-L-homoserine lactone	BIA-A1493
N-Acetylserotonin	5-Hydroxymelatonin; N-Acetyl-5- hydroxytryptamine; N-Acetylserotonin; Normelatonin; O-demethylmelatonin	BIA-A1738
N-Acetyltryptamine		BIA-A1732
N-Acetyltyramine		BIA-A1731
Actagardin	A 3802-IV-3, Actagardine, Gardimycin, NVB 302	BIA-A1528
Actinomycin D	Dactinomycin, Actinomycin IV, Actinomycin Au3, Actinomycin B1, Actinomycin BiV, Actinomycin C1, Actinomycin DiV, Actinomycin Fo, Actinomycin I1, Actinomycin S2, Actinomycin X1, Auranthin A3, Auranthin C, NSC 3053, Chuoungwamycin B	BIA-A1185
Actinopyrone A		BIA-A1001
Actinotetraose Hexatiglate		BIA-A1002
Adipostatin A	5-Pentadecyl-1,3-benzenediol, 5- Pentadecylresorcinol; Cardol	BIA-A1689
Aflatoxin B1	Aflatoxin FB1, Aflatoxin B	BIA-A1232
Aflatoxin B2		BIA-A1233
Aflatoxin G1		BIA-A1234
Aflatoxin G2		BIA-A1235
Alamethicin F50	Alamethicin F, Alamethicin Rf 50, Atroviridin A, 18-L-Glutamine-alamethicin I	BIA-A1543
1-Alaninechlamydocin		BIA-A1402
Albofungin	Kanchanomycin, BA 180265A, P 42-1	BIA-A1419
Amauromine	FR 900220; WF 6237, Antibiotic FR 900220	BIA-A1631
Amphomycin	Glumamycin, Amfomycin, A1437E	BIA-A1601
Amphotericin B	Amphotericin	BIA-A1441
Andrastin A	NSC 697452	BIA-A1649
Anguinomycin A	5-Demethylleptomycin A, KR 2827A	BIA-A1003
Anhydrochlortetracycline hydrochloride		BIA-A1552
Anhydroepiophiobolin A	Anhydro-6-epiophiobolin A, 3-	BIA-A1536



Product Name	Synonyms	Code No.
Anhydroerythromycin A	Erythromycin anhydride	BIA-A1348
Anhydroophiobolin A	14,17- Epoxy-5-oxo-3,7,18-ophiobolatrien-21-al	BIA-01198
Anhydrotetracycline hydrochloride		BIA-A1340
Anidulafungin	LY 303366, Eraxis	BIA-A1423
Anisomycin	Flagecidin, SA 3097C1, PA 106, Anhydroscopin A, NSC 76712	BIA-A1215
Ansatrienin A	Mycotrienin I, T 23I	BIA-A1004
Ansatrienin B	T 23II, Mycotrienin II, T 23II	BIA-A1005
Antimycin A1		BIA-A1442
Antimycin A2		BIA-A1443
Antimycin A3	Blastmycin, NSC 58239	BIA-A1444
Antimycin A4		BIA-A1445
Antimycin complex	Antipiriculin, Levoristatin, Virosin, Vulgarin	BIA-A1374
Aphidicolin	ICI 69653	BIA-A1217
Apicidin		BIA-A1006
a-Apooxytetracycline		BIA-A1343
β-Apooxytetracycline	β-Apooxytetracycline	BIA-A1344
Apoptolidin		BIA-A1007
Ascochlorin	LL-Z 1272 gamma, Ilicicolin D	BIA-A1115
Ascomycin	L 683590, FR 900520, Immunomycin, FK 520, WS 7238A, NSC 106410	BIA-A1237
Aspartocin D		BIA-A1620
Aspercolorin		BIA-A1227
Asperphenamate		BIA-A1643
Aspochalasin D		BIA-A1642
Aspochalasin M		BIA-A1644
Aspochracin		BIA-A1717
Asterric Acid	Dimethylosoic acid, TAN 1415A, WF 12880A	BIA-A1008
Asterriquinol D dimethylether		BIA-A1630
Asukamycin	Asukamycin A, AM 1024	BIA-A1600
Aszonalenin	Aszonalenine; NSC 374337	BIA-A1686
Aurantiogliocladin		BIA-A1654
Aureothin	Distacin, Mycolutein, 74A'', JA 2814K	BIA-A1009
Aureothricin	Propionylpyrrothione, Farcinin	BIA-A1120
Aureusimine B	Phevalin	BIA-A1309
Avenaciolide		BIA-A1409
Avermectin B1a	5-O-Demethylavermectin A1a, C 076B1a	BIA-A1010



Product Name	Synonyms	Code No.
Avermectin B1a aglycone		BIA-A1587
Avermectin B1a monosaccharide		BIA-A1585
Δ^2 -Avermectin B1a		BIA-A1579
epi-Avermectin B1a		BIA-A1576
Avermectin B1b	C 076B1b	BIA-A1011
Azamulin	TMD 85-530, SA 85530b	BIA-A1489
Azidamfenicol	Azidoamphenicol, Leukomycin N	BIA-A1485
Azithromycin		BIA-A1312
Azomycin	2-Nitroimidazole, Amicin	BIA-A1690
Bacillosporin C		BIA-B1665
Bafilomycin A1		BIA-B1012
Bafilomycin B1	Setamycin	BIA-B1110
Bafilomycin C1	L-681, 110A1	BIA-B1111
Bafilomycin D	Tubaymycin, 3D5	BIA-B1162
Bassianolide		BIA-B1557
Beauvericin		BIA-B1238
Benzomalvin A		BIA-B1647
Benzomalvin B		BIA-B1646
Benzomalvin C		BIA-B1679
Berninamycin A	Berninamycin, U27810	BIA-B1121
Berninamycin D		BIA-B1147
Bestatin	Ubenamix, Inobestin, NK 421	BIA-B1278
Biapenem	CL 186815; L 627; LJC 10627; Omegacin	BIA-B1663
Bicyclomycin	Bicozamycin, Aizumycin, Bacteron, CGP 3543E, WS4545, 5879	BIA-B1367
Bicyclomycin benzoate	Bicozamycin benzoate, FR 2054	BIA-B1318
Biochanin A	4'-Methylgenistein; 5,7-Dihydroxy-4'- methoxyisoflavone; Biochanin; Genistein 4- methyl ether; NSC 123538; Olmelin.	BIA-B1724
Bischloroanthrabenzoxocinone	BABX	BIA-B1163
Blasticidin A		BIA-B1145
Blasticidin S	Cytovarin, Bla-S, 21544, A83094C, NSC 91770	BIA-B1425
Blasticidin S hydrochloride		BIA-B1426
Bleomycin complex	Blenoxane, Bleo	BIA-B1203
Borrelidin	Treponemycin, U 78548, C2989	BIA-B1013
Brefeldin A	Ascotoxin, Cyanein, Decumbin	BIA-B1122



Product Name	Synonyms	Code No.
Brevianamide F	Cyclo(L-Pro-L-Trp); (3S,8aS)-Hexahydro-3-(1H-indol-3-ylmethyl)pyrrolo[1,2-a]pyrazine-1,4-dione; Brevianamide F; Cyclo(L-Pro-L-Trp); Cyclo-L-tryptophyl-L-proline; L-Prolyl-L-tryptophan anhydride; Prolyltryptophanyldiketopiperazine; cyclo-L-Prolyl-L-tryptop	BIA-B1715
Brevicompanine B		BIA-B1176
Bromamphenicol		BIA-B1490
Bromothricin		BIA-B1623
Butyrolactone I	Olomoucin	BIA-B1406
Butyryl-L-homoserine lactone	C4-HSL, N-Butyryl-L-homoserine lactone, PAI	BIA-B1494
Caerulomycin	Cerulomycin, Caerulomycin A	BIA-C1373
Caffeic acid	3,4-Dihydroxybenzeneacrylic acid; 3,4-Carboxyethenyl)-1,2-dihydroxybenzene; 4-(2'-Carboxyvinyl)-1,2-dihydroxybenzene; DHCA; NSC 57197; NSC 623438	BIA-C1727
Calcimycin	A 23187, Calimycin	BIA-C1236
Calphostin C	UCN 1028 C, PKF 115-384	BIA-C1014
Candicidin complex	Levorin	BIA-C1564
Capreomycin	Capromycin, Caprolin, Capastat, Capostatin, L 29275	BIA-C1454
Capreomycin sulfate	Caprocin	BIA-C1455
Caspofungin acetate	Cancidas, L-743,872, MK-0991	BIA-C1239
Cellocidin	Aquamycin, Butynesiamide, Lenamycin,	BIA-C1449
Cercosporamide		BIA-C1015
Cercosporin	CGP049090, NSC 153111	BIA-C1521
Cerulenin	Helicocerin, NSC 116069, 2,3-Epoxy-4-oxo-7,10-dodecadienamide	BIA-C1218
Chaetocin	Chetocin	BIA-C1146
Chaetomin	Chetomin	BIA-C1719
Chaetominine		BIA-C1718
Chartreusin	Lambdamycin, NSC 5159, 747, 1293, X465A, G 261A	BIA-C1124
Chevalone B		BIA-C1638
Chevalone C		BIA-C1637
Chloramphenicol	Chlorcetin, Chlorocidin, Chloromycetin, NSC 3069, NCI C 55709, I 337A	BIA-C1474
Chloramphenicol acetate	3-O-Acetylchloramphenicol, Chloramphenicol 3-acetate	BIA-C1476
Chloramphenicol base		BIA-C1475
Chloramphenicol palmitate	Chloramphenicol 3-palmitate	BIA-C1477



Product Name	Synonyms	Code No.
Chloramphenicol succinate	Chloramphenicol succinate, Kemicetine	BIA-C1478
Chloramphenicol succinate sodium	Chloramphenicol sodium succinate	BIA-C1479
Chlorothricin	K 818A	BIA-C1016
Chlortetracycline	Aureomycin, Chlorotetracycline, Biomycin	BIA-C1335
Chlortetracycline hydrochloride	7-Chlortetracycline hydrochloride, NSC 13252	BIA-C1506
Chromomycin A2	Aburamycin A, NSC 131187	BIA-C1518
Chromomycin A3	Aburamycin, Toyomycin, NSC 58514, B 599-III, SR1768E	BIA-C1240
Chrysomycin A	Chrysomycin V, Virenomycin V, Albacarcin V,	BIA-C1017
Chrysomycin B	Chrysomycin M, Virenomycin M, Albacarcin M	BIA-C1018
Cinnamamide	3-Phenyl-2-propenamide; 2- Benzylideneacetamide; 3-Phenylacrylamide; 3- Phenylpropenamide; AG835; Cinnamic acid amide; Coumaramide; NSC 32953	BIA-C1733
Cinnamic acid	3-Phenyl-2-propenoic acid; 3-Phenylacrylic acid; NSC 623441; NSC 9189; Phenylacrylic acid; beta-Phenylacrylic acid	BIA-C1725
Cinnamycin	Lanthiopeptin, Ro 09-0198	BIA-C1432
Citreoindole		BIA-C1697
Citreoviridin	Citreoviridin A	BIA-C1241
Citrinin	Meleamycin, Antimycin, Monascidin A	BIA-C1242
Citromycetin	Frequentic acid	BIA-C1189
Clarithromycin	6-O-Methylerythromycin A	BIA-C1313
Clavulanate potassium	Clavubactam potassium, BRL 14151	BIA-C1243
Clindamycin	7-Chloro-7-deoxylincomycin, 7-Chlorolincomycin	BIA-C1456
Clindamycin 2-phosphate	7(S)-Chloro-7-deoxylincomycin 2-phosphate, Cleocin phosphate, Clindamycin phosphate, NSC 618653, U 28508	BIA-C1503
Clindamycin hydrochloride	7-Chloro-7-deoxylincomycin hydrochloride, 7-Chlorolincomycin hydrochloride	BIA-C1502
Cochlioquinone A	Luteoleersin	BIA-C1019
Cochlioquinone B		BIA-C1020
Collismycin	SF 2738A	BIA-C1624
Concanamycin A	Folimycin, TAN 1323B	BIA-C1021
Concanamycin B	S 45B	BIA-C1366
Conglobatin		BIA-C1022
Cordycepin	3'-Deoxyadenosine; 9-Cordyceposidoadenosine; Adenine coryceposide; Cordycepine; NSC 401022; NSC 63984	BIA-C1688



Product Name	Synonyms	Code No.
Corynecin I	Dechlorochloramphenicol, Didechloramphenicol	BIA-C1480
Corynecin II		BIA-C1481
Corynecin III	Methamphenicol	BIA-C1482
Corynecin IV		BIA-C1483
Corynecin V		BIA-C1484
p-Coumaric acid	4-Coumaric acid; 4-Hydroxycinnamic acid; 4'- Hydroxycinnamic acid; NSC 59260; NSC 674321; p-Cumaric acid; p-Hydroxycinnamic acid; p- Hydroxyphenylacrylic acid; b-[4- Hydroxyphenyl]acrylic acid	BIA-C1726
Curvularin	S-Curvularin, NSC 166071	BIA-C1125
Cyclo(D-Ala-L-Pro)	(3R,8aS)-Hexahydro-3-methylpyrrolo[1,2-a]pyrazine-1,4-dione; Cyclo(L-prolyl-D-alanyl)	BIA-C1713
cyclo(Δ-Ala-L-Val)		BIA-C1361
Cyclo(L-Leu-L-Pro)	Cyclo(L-Pro-L-Leu); Cyclo(L-leucyl-L-prolyl); Cyclo(L-prolyl-L-leucyl); Cyclo(Leu-Pro); Cyclo(Pro-Leu); Cyclo(proline-leucine); Cyclo-L-prolyl-L-leucine; Gancidin W; L-Leucyl-L-proline lactam; L-Leucyl-L-prolyl lactam; Maculosin 6; cis-Cyclo(L-Leu-L-Pro)	BIA-C1710
Cyclo(L-Leu-L-Trp)	(3S,6S)-3-(1H-Indol-3-ylmethyl)-6-(2-methylpropyl)-2,5-piperazinedione; Cyclo(L-leucyl-L-tryptophyl) (8CI); BP II; Cyclo(Trp-Leu);	BIA-C1711
Cyclo(L-Phe-L-Phe)	(3S,6S)-3,6-Dibenzylpiperazine-2,5-dione; Cyclo(phenylalanylphenylalanine); Cyclo-L- phenylalanyl-L-phenylalanine; Phenylalanylphenylalanyldiketopiperazine, cis-L- 3,6-dibenzyl-2,5-dioxopiperazine; Phenylalanine anhydride; 3,6-Dibenzyl-2,5-dioxopiperazine	BIA-C1716
Cyclo(L-Phe-L-Pro)	Maculosin 3; (3S,8aS)-Hexahydro-3- (phenylmethyl)pyrrolo[1,2-a]pyrazine-1,4-dione; Cyclo(L-Pro-L-Phe); Cyclo(Lphenylalanyl-L-prolyl-); Cyclo(L-prolyl-L-phenylalanyl); Cyclo(Phe- Pro); L-Phenylalanyl-L-proline lactam; L-Prolyl-L- phenylalanine diketopiperazin	BIA-C1712
cyclo(L-Phe-L-Pro)		BIA-C1358
Cyclo(L-Phe-L-Val)	(3S,6S)-3-(1-Methylethyl)-6-(phenylmethyl)-2,5-piperazinedione; Cyclo(Phe-Val); DKP 101516	BIA-C1709
cyclo(L-Pro-L-Tyr)	Maculosin	BIA-C1359
cyclo(L-Pro-L-Val)		BIA-C1360
Cyclo(L-Trp-L-Trp)		BIA-C1721
Cyclo(L-Tyr-L-Val)	Cyclic diketopiperazine-L-valyl-L-tyrosine; Cyclo(Val-Tyr)	BIA-C1708
Cycloechinulin		BIA-C1197
Cycloheximide	Actidione, Naramycin, U 4527, NSC 185	BIA-C1415



Product Name	Synonyms	Code No.
Cyclopenin		BIA-C1126
Cyclopeptine	Benzyl-3,4-dihydro-4-methyl-1H-1,4- benzodiazepine-2,5-dione	BIA-C1154
Cyclopiazonic acid		BIA-C1244
Cyclosporin A	Ciclosporin, Ramihyphin A, OL 27-400, CyA, S 7481F1	BIA-C1208
Cyclosporin B	7-L-Alaninecyclosporine A	BIA-C1245
Cyclosporin C	7-L-Threoninecyclosporin A, WF 3484	BIA-C1246
Cyclosporin D	7-L-valinecyclosporine A	BIA-C1247
Cyclosporin H	5-(N-methyl-D-valine)cyclosporine A	BIA-C1248
Cytochalasin A	Dehydrophomin	BIA-C1249
Cytochalasin B	Phomin	BIA-C1250
Cytochalasin C		BIA-C1169
Cytochalasin D	Zygosporin A	BIA-C1170
Cytochalasin E		BIA-C1251
Cytochalasin H	Kodocytochalasin 1, Paspalin P1, 17-Deoxo-21- acetylzygosporin D	BIA-C1023
Cytochalasin J	Kodocytochalasin 2, Paspalin P11, Deacetylcytochalasin H, 17-Deoxozygosporin D	BIA-C1024
Daidzein	4',7-Dihydroxyisoflavone; Daidzeol; Daidzin aglycone; FW 635I-1; Isoaurostatin; K 251b	BIA-D1723
Dalbavancin	A-A-1, Dalbavancin Ao, BI 397, MDL 63397	BIA-D1382
Dalfopristin mesylate		BIA-D1355
Daptomycin	LY 146032	BIA-D1205
Davercin	Erythromycin A 11,12-carbonate, Erythromycin A cyclic 11,12-carbonate, Erythromycin cyclic carbonate	BIA-E1433
Deacetylanisomycin	SA 3097D1	BIA-D1368
Deacetylravidomycin	AY 26623	BIA-D1074
Decanoyl-L-homoserine lactone	C10-HSL, N-Decanoyl-L-homoserine lactone	BIA-D1497
Decatromicin B		BIA-D1412
Deethylindanomycin	16-Dethylindanomycvin, Omomycin, A 83094A	BIA-D1288
10,11-Dehydrocurvularin		BIA-D1399
Dehydrocyclopeptine		BIA-D1155
Demeclocycline	6-Demethylchlotetracycline, DMCT, 7-Chloro-6-demethyltetracycline, Ledermycin, RP 10192	BIA-D1462
Demeclocycline hydrochloride	6-Demethylchlotetracycline hydrochloride, 7- Chloro-6-demethyltetracycline hydrochloride, Declomycin, Ledermycin hydrocloride, RP 10192	BIA-D1463
Demethoxyviridiol		BIA-D1025



Product Name	Synonyms	Code No.
N-Demethylerythromycin A		BIA-D1352
Deoxybrevianamide E	L-Prolyl-2-(1,1-dimethylallyl)-L-tryptophan anhydride	BIA-D1174
Deoxyenterocin	8-Deoxyenterocin	BIA-D1332
Deoxyfusapyrone		BIA-F1437
Deoxyviolacein		BIA-D1328
Derquantel	2-Deoxoparaherquamide, 2- Deoxoparaherquamide A, 2- Desoxoparaherquamide A, PF 00520904, PNU 141962	BIA-D1514
Desertomycin A	U 64767, 1012-A	BIA-D1294
10'-Desmethoxystreptonigrin		BIA-S1088
Desotamide		BIA-D1026
Diacetylcercosporin		BIA-D1607
Diacetylphloroglucinol		BIA-D1389
Diffractaic acid	Dirhizonic acid; NSC 5901; NSC 685595	BIA-D1670
Dihydroaeruginoic acid		BIA-D1392
Dihydrocyclosporin A		BIA-D1252
Dihydropleuromutilin		BIA-D1526
Dihydrospinosyn A aglycone		BIA-D1599
1,6-Dimethoxyphenazine	Crystalloiodinine B	BIA-D1523
Dinactin	AKD 1C, S 3466A	BIA-D1027
Dipicolinic acid	2,6-Pyridinedicarboxylic acid	BIA-D1573
Dirithromycin	LY-237216	BIA-D1314
Dodecanoyl-L-homoserine lactone	C12-HSL, dDHL, N-Dodecanoyl-L-homoserine lactone	BIA-D1498
Doramectin	UK67994	BIA-D1301
Doramectin aglycone		BIA-D1584
Doramectin monosaccharide		BIA-D1582
Δ^2 -Doramectin		BIA-D1580
<i>epi-</i> Doramectin		BIA-D1577
Doripenem	S 4661, Doribax, Finibax	BIA-D1664
Doxorubicin	Adriamycin, 14-Hydroxydaunomycin, FI 106, K 1039, KW 125, NSC 123127	BIA-D1229
Doxorubicin hydrochloride	Adriamycin hydrochloride	BIA-D1202
Doxycycline	6- Deoxy-5-hydroxytetracycline, 6- Deoxyoxytetracycline, Doxytetracycline, GS 3065, Hydramycin, Medeomycin, Vibramycin	BIA-D1469



Product Name	Synonyms	Code No.
Doxycycline hydrochloride	6- Deoxy-5-hydroxytetracycline hydrochloride, 6- Deoxyoxytetracycline hydrochloride, Doxytetracycline hydrochloride	BIA-D1470
Drimentine A		BIA-D1394
Drimentine B		BIA-D1395
Drimentine C		BIA-D1396
Duclauxin	NSC 258308	BIA-D1667
Echinocandin B	A 30912, A 22082, 7810, SL 7810F	BIA-E1253
Echinulin	Echinuline	BIA-E1684
Elaiophylin	255-E, 5001B, 56-62, 846 I, SNA 4606-3, Azalomycin B, Gopalamicin, Salbomycin	BIA-E1028
Elasnin		BIA-E1645
Emamectin B1a	L 656748	BIA-E1545
Emodin	1,3,8-Trihydroxy-6-methylanthraquinone; 1,6,8- Trihydroxy-3-methylanthraquinone; 3-Methyl- 1,6,8-trihydroxyanthraquinone; 4,5,7- Trihydroxy-2-methylanthraquinone; Archin; Emodin; Emodol; Frangula emodin; Frangulic acid; NSC 408120; NSC 622947; Rheum emodin	BIA-E1706
Enniatin A	Lateritin I	BIA-E1165
Enniatin A1	2-(N-Methyl-L-valine)enniatin A	BIA-E1166
Enniatin B		BIA-E1167
Enniatin B1	2-(N-Methyl-L-isoleucine)enniatin B	BIA-E1168
Enniatin complex		BIA-E1071
Enopeptin A	Enopeptin II, BRN 5373924, NSC657143	BIA-E1555
Enterocin	Vulgamycin, A 5294, WS 8096,	BIA-E1279
Epianhydrochlortetracycline hydrochloride	4-Epianhydrochlortetracycline hydrochloride	BIA-E1346
Epianhydrotetracycline hydrochloride	4-Epianhydrotetracycline hydrochloride	BIA-E1341
Epichlortetracycline hydrochloride	4-Epichlortetracycline hydrochloride	BIA-E1345
Epicoccamide		BIA-E1427
Epiequisetin	5'-Epiequisetin	BIA-E1434
Epioxytetracycline	4-Epioxytetracycline	BIA-E1342
Epitetracycline hydrochloride	4-Epitetracycline hydrochloride	BIA-E1339
Epothilone A	EpoA	BIA-E1254
Epothilone B	ЕроВ	BIA-E1255
19,20-Epoxycytochalasin C		BIA-E1171
19,20-Epoxycytochalasin D		BIA-E1172



Product Name	Synonyms	Code No.
Eprinomectin	MK-397, 4"R-epiacetylamino-4"- deoxyavermectin B1	BIA-E1300
Eprinomectin B1a		BIA-E1547
Eprinomectin B1b		BIA-E1548
Equisetin		BIA-E1029
Erythromycin A	Ilotycin, Erythromycin	BIA-E1311
Erythromycin A enol ether		BIA-E1347
Erythromycin A N-oxide	Erythromycin N-oxide	BIA-E1539
Erythromycin A oxime		BIA-E1381
Erythromycin B	12-Deoxyerythromycin, Berythromycin	BIA-E1350
Erythromycin C	3"-O-Demethylerythromycin A	BIA-E1351
Erythromycylamine	9(S) Erythromycylamin A, BRL 42852ER, LY 024410	BIA-E1517
Ethyl orsellinate	2,4-dihydrox-6-methylbenzoic acid ethyl ester; 6-methyl- beta-Resorcylic acid ethyl ester	BIA-E1660
Eupenifeldin		BIA-E1674
Evernic acid		BIA-E1676
Everolimus		BIA-E1384
Extracellular Death Factor	EDF	BIA-E1377
Feglymycin		BIA-F1420
Ferulic acid	3-Methoxy-4-hydroxycinnamic acid; 4-Hydroxy-3-methoxycinnamic acid; 4'-Hydroxy-3'-methoxycinnamic acid; Coniferic acid; Ferulaic acid; NSC 2821; NSC 51986; NSC 674320	BIA-F1728
Fidaxomicin	Clostomicin B1, Lipiarmycin A3, Tiacumicin B, OPT 80	BIA-F1356
Filipin complex		BIA-F1619
Filipin II		BIA-F1615
Filipin III	14-Deoxylagosin	BIA-F1616
Flambalactone		BIA-F1626
Florfenicol	(-)Florfenicol, Sch 25298	BIA-F1487
Florfenicol amine	Sch 40458	BIA-F1488
Folipasatin		BIA-F1699
Fostriecin	Phosphotrienin, CI 920, CL 1565A, PD 110161, NSC 339638	BIA-F1030
Frequentin		BIA-F1702
Fulvic acid		BIA-F1625
Fumagillin	Fumadil B, H-3, NSC 9168, U 5762, TNP-470	BIA-F1256
Fumarprotocetraric acid		BIA-F1672



Product Name	Synonyms	Code No.
Fumigatin methylether	2,3-Dihydroxy-5-methyl-1,4-benzoquinone; Coenzyme Q0; Ubiquinone 0; Ubiquinone Q0	BIA-F1658
Fumiquinazoline D		BIA-F1628
Fumitremorgin C		BIA-F1031
Fumonisin B1	Macrofusin	BIA-F1257
Fumonisin B2		BIA-F1258
Funalenone	BMS 304245	BIA-F1666
Fusapyrone		BIA-F1436
Fusaric acid	5-Butylpicolinic acid; NSC19870; NSC 135043	BIA-F1652
Fusarisetin A	(+)-Fusarisetin A	BIA-F1435
Fusidate sodium	Ramycin, NSC 56192, SQ 16603, SQ 16603	BIA-F1259
Galiellalactone		BIA-G1032
Gamithromycin	ML 1709460	BIA-G1568
Geldanamycin		BIA-G1101
Geninthiocin	14-Demethylberinamycin	BIA-G1033
Genistein	4',5,7-Trihydroisoflavone; Differenol A; NSC 36586; Prunetol; Sophoricol	BIA-G1722
Gentamicin C2b	Micronomicin, Sagamicin, Santemycin, Antibiotic KW 1062, Antibiotic XK 62-2	BIA-G1563
Germicidin A		BIA-G1282
Germicidin B		BIA-G1283
Gilvocarcin M	Anandimycin B, Toromycin B, 1072A	BIA-G1034
Gilvocarcin V	Anandimycin A, Toromycin, 1072B	BIA-G1035
Gliorosein	1,6-Dihydro-3,4-dimethoxy-6-methyltoluquinone	BIA-G1680
Gliotoxin	Aspergillin, SN 12879, SN 12870	BIA-G1260
Gramicidin complex		BIA-G1592
Graphislactone A	Graphislactone S1	BIA-G1559
Griseofulvin	Amudane, Grisovin, Curling factor, Gricin, Grifulvin, Grisactin, Fulcin, Norofulvin, Likuden, Idifulvin NSC 34533	BIA-G1212
Hemipyocyanine	1-Hydroxyphenazine, 1-Phenazinol, Pyoxanthose, NSC 88882	BIA-H1520
Herbicidin A		BIA-H1567
Herbimycin A	Herbimycin, TAN 420F	BIA-H1036
Herbimycin C	TAN 420D	BIA-H1144
Heronamide C		BIA-H1286
Hexadecanoyl-L-homoserine lactone	C16-HSL, N-Hexadecanoyl-L-homoserine lactone	BIA-H1500
Hexanoyl-L-homoserine lactone	C6-HSL, N-Hexanoyl-L-homoserine lactone	BIA-H1495



Product Name	Synonyms	Code No.
Hirsutide		BIA-H1635
Hydroaurantiogliocladin		BIA-H1651
4-Hydroxy-6-methyl-2- pyrone	4-hydroxy-6-methyl-2H-pyran-2-one; 4- Hydroxy-6-methyl-a-pyrone; NSC 34625; Triacetic acid lactone	BIA-H1736
4-Hydroxyalternariol		BIA-H1558
21-Hydroxyoligomycin A	Nemadectin omega, LL-F28249 omega	BIA-O1062
14-a-Hydroxypaspalinine		BIA-P1632
7-Hydroxypestalotin	7-Hydroxypestalotin, 6,7-Dihydroxy-3-methoxy-2-decen-5-olide, LL-P880 beta	BIA-H1068
Hygrolidin		BIA-H1295
Hygromycin B	Antihelmycin	BIA-H1562
Ikarugamycin		BIA-I1223
Illudin M	Illudine M; NSC 400978; NSC 626370	BIA-I1685
Illudin S		BIA-I1398
Indanomycin	X 14547A	BIA-I1296
Indolmycin	PA 155A	BIA-I1040
Integracin A		BIA-I1280
Integracin B		BIA-I1281
Ionomycin	SQ 23377, EM 94	BIA-I1261
Isoapoptolidin		BIA-I1041
Isochlortetracycline	Isoaureomycin; 7-Chloroisotetracycline	BIA-I1656
Isocyclosporin A		BIA-I1262
Isoferulic acid	3-Hydroxy-4-methoxycinnamic acid; 4- Methoxycaffeic acid; 4-O-Methylcaffeic acid; Hesperetic acid; NSC 51987	BIA-I1729
Isokotanin B		BIA-I1633
Ivermectin B1a	Dihydroavermectin B1a, Ivermectin, 22,23- Dihydroavermectin B1a	BIA-I1119
Ivermectin B1a aglycone	Dihydroavermectin B1 aglycone, Ivermectin B1 aglycone	BIA-I1151
Ivermectin B1a monosaccharide	Dihydroavermectin B1 monosaccharide, Ivermectin B1 monosaccharide	BIA-I1150
Δ^2 -Ivermectin B1a		BIA-I1581
epi-Ivermectin B1a		BIA-I1578
Ivermectin B1b	Dihydroavermectin B1b, 22,23- Dihydroavermectin B1b	BIA-I1117
JBIR-15		BIA-J1720
Juglone	5-Hydroxy-1,4-naphthoquinone, Nucin, PD7, CI75500, Natural brown 7	BIA-J1739



Product Name	Synonyms	Code No.
K252A	SF 2370	BIA-K1225
Kazusamycin A	Kazusamycin, Hydroxyleptomycin B, Hydroxyelactocin, CL 1957B, PD 114721	BIA-K1042
Kazusamycin B	Hydroxyleptomycin A, CL 1957E, PD 124895, PD 124,895	BIA-K1043
Kendomycin	TAN 2162	BIA-K1143
Kibdelone A		BIA-K1329
Kibdelone B		BIA-K1330
Kibdelone C		BIA-K1331
Kigamicin C		BIA-K1116
Kijanimicin	Sch 25663	BIA-K1153
Kojic acid	5-Hydroxy-2-(hydroxymethyl)-4H-pyran-4-one; NSC 1942	BIA-K1696
Kotanin A		BIA-K1634
Kumbicin C		BIA-K1640
L 156602	Antibiotic L 16602	BIA-L1621
L-681217	L 681217	BIA-L1044
Lachnone A		BIA-L1401
Lagosin	Fungichromin, 14-Hydroxyfilipin III, Cogomycin, Moldcidin B, A246, Pentamycin	BIA-L1613
Lasalocid	X 537A, Lasalocid A	BIA-L1533
Lasalocid sodium	Avatec, Bovatec, Ro 2-2985, X 537A	BIA-L1302
Lateropyrone	Avenacein Y, Antibiotic Y	BIA-L1128
Lecanoric acid	p-Diorsellinic acid; alpha-Orsellinic acid; Glabratic acid; NSC 249981; Parmelialic acid;	BIA-L1669
Leptomycin A	ATS 1287A, PD 118607, Jildamycin	BIA-L1045
Leptomycin B	Elactocin, ATS 1287B, CI 940, CL 1957A, PD 114720, Mantuamycin	BIA-L1046
Leucanicidin		BIA-L1369
Leucinostatin A	Tryanocidin, CC 1014, M 13959, ML 1014, P 168, SF 1907VIII, U 53496	BIA-L1451
Leucomycin A1	Kitasamycin A1, Turimycin H5, Leucomycin V 4-isovalerate	BIA-L1538
Leucomycin A13	Kitasamycin A13	BIA-L1365
Leucomycin A4	Kitasamycin A4	BIA-L1364
Leucomycin A5	Kitasamycin A5, Turimycin H4	BIA-L1357
Leucomycin complex	Kitasamycin A1, Turimycin H5, Leucomycin V 4-isovalerate	BIA-L1551
Lexithromycin	Erythromycin A 9-methoxime, Wy 48314	BIA-L1519
Lincomycin	Linocin, Lincolnensin, U 10149, Jiemycin	BIA-L1457



Product Name	Synonyms	Code No.
Lincomycin hydrochloride	Linocin, NSC 70731, U 10149a	BIA-L1458
a-Lipomycin		BIA-L1418
LL Z1640-2	C292, L 783278, 5Z-7-Oxozeaenol	BIA-L1160
LL Z1640-4	Zeaenol	BIA-L1161
Lobaric acid	Usnetic acid	BIA-L1671
Lovastatin	Mevinolin, Monacolin K, L 154803, MB 530B, MSD 803	BIA-L1264
Luteoreticulin	Griseulin	BIA-L1129
Luzopeptin A	BBM-928A	BIA-L1139
Lydicamycin		BIA-L1047
Maculosin	Cyclo(L-Pro-L-Tyr); (3S,8aS)-Hexahydro-3-[(4-hydroxyphenyl)methyl]pyrrolo[1,2-a]pyrazine-1,4-dione; Cyclo L-Prolyl-L-tyrosine; Cyclo(L-Pro-L-Tyr); Cyclo(L-prolinyl-L-tyrosine); Cyclo(L-tyrosyl-L-proline); L-Proline-L-tyrosine anhydride; Maculosin 1; Macul	BIA-M1714
Maduramicin	alpha-Maduramicin, Maduramycin, X 14868A, CL 273703, LL-C 23024-A,	BIA-M1308
Maduramicin ammonium	CL 259971, Maduramycin sodium	BIA-M1542
Marcfortine A	UK 111866	BIA-M1103
Meclocycline	7-Chloro-6-methylene-oxytetracycline, GS 2989, NCS 78502	BIA-M1464
Meclocycline sulfosalicylate		BIA-M1465
Meleagrin	6-O-Methyloxaline, Meleagrine	BIA-M1446
Methacycline	6-Methyleneoxytetracycline, Metacycline, Rondomycin	BIA-M1467
Methacycline hydrochloride	6-Methyleneoxytetracycline hydrochloride, Metacycline hydrochloride, Londomycin	BIA-M1468
3-Methylorsellinic acid	2,4-dihydroxy-3,6-dimethylbenzoic acid3,6-dimethyl-beta-Resorcylic acid; beta-orcinolcarboxylic acid	BIA-M1661
6-Methylsalicylic acid	2-Hydroxy-6-methylbenzoic acid; 6-Hydroxy-o-toluic acid; 2,6-Cresotic acid	BIA-M1655
O-Methylsterigmatocystin		BIA-M1214
9-Methylstreptimidone	TS 885, NSC 248958	BIA-M1404
O-Methylviridicatin	AIDS-089094, 3-Methoxy-4-phenyl-1H-quinolin- 2-one	BIA-M1149
Mevastatin	Compactin, ML 236B, SIPI 8915	BIA-M1209
Micafungin		BIA-M1422
Micafungin sodium	Mycamine	BIA-M1550
Micrococcin P1		BIA-M1590
Milbemectin		BIA-M1553



Product Name	Synonyms	Code No.
Milbemycin A3	B 41A3, Milbemycin alpha1, Milbemectin	BIA-M1051
Milbemycin A3 oxime	5-Oxomilbemycin A3 oxime	BIA-M1531
Milbemycin A4	B 41A4, Milbemycin alpha3	BIA-M1052
Milbemycin A4 oxime	5-Oxomilbemycin A4 oxime	BIA-M1532
Milbemycin D	B 41D	BIA-M1054
Milbemycin oxime		BIA-M1299
Minocycline	7-Dimethylamino-6-demethyl-6-deoxytetracycline, CL 59806, Minocyclin	BIA-M1471
Minocycline hydrochloride	Klinomycin, Minocycline chloride, Minomycin, NSC 141993	BIA-M1472
Mithramycin A	Aureolic acid, Mithracin, Plicamycin, Mitramycin, A 2371, LA 7017, NSC 23559, PA 144	BIA-M1268
Mitomycin C	Mitomycin, Mitomycin S, Mitiromycin E, Ametycine, Mitocin C, Mutamycin, NSC 26980	BIA-M1183
Moenomycin complex	Bambermycin, Flavomycin	BIA-M1297
Monactin	5-demethyl-5-ethylnonactin, AKD 1B	BIA-M1055
Monazomycin		BIA-M1400
Monensin A	Monensic acid, Lilly 67314, A 3223A.	BIA-M1303
Moniliformin	Semisquaric acid sodium salt	BIA-M1269
Monoacetylphloroglucinol	2',4',6'-trihydroxyacetophenone	BIA-M1378
Moxidectin	Cydectin, CL 301,423	BIA-M1298
Mutilin		BIA-M1333
Mycophenolic acid	Melbex, Lilly 68618, NSC 129185	BIA-M1207
Myriocin	Thermozymocidin, ISP 1	BIA-M1219
Narasin	4-Methylsalinomycin, A28086A, C7819A	BIA-N1363
Narasin sodium	4-Methylsalinomycin sodium	BIA-N1541
Nargenicin	Nargenicin A1, CP47444, U39760	BIA-N1325
Nemadectin	S541A, LL-F28249 alpha	BIA-N1056
Neoantimycin		BIA-N1057
Neoaureothin	Spectabilin	BIA-N1058
Neohydroxyaspergillic acid		BIA-N1641
Nidulin	Methylustin	BIA-N1157
Nigericin	Polyetherin A, Azalomycin M, Helixin C, K 178, X 464	BIA-N1228
Nigericin sodium	Polyetherin A, Azalomycin M, Helixin C, K 178, X 464, Pandavir	BIA-N1220
3-Nitropropionic acid	Bovinocidin; Hiptagenic acid; 3-Nitropropanoic acid	BIA-N1694
Nodusmicin	U 59761	BIA-N1326



Product Name	Synonyms	Code No.
Nogalamycin	U 15167, Antibiotic U 15167	BIA-N1575
Nonactin	Werramycin, FH 3582A, NSC 52141, AKD 1A, KD 1A	BIA-N1270
Nornidulin	Ustin	BIA-N1159
Nosiheptide	Nosiheptine, Multhiomycin, Primofax, RP 9671	BIA-N1574
Novobiocin	Albamycin, Vulcamycin, PA 93, WS 6629, Griseoflavin, S 800.	BIA-N1306
Nybomycin	NSC 613948	BIA-N1414
Nystatin A1	Polyfungin A1	BIA-N1416
Ochratoxin A		BIA-O1195
Ochratoxin B		BIA-O1196
Ochratoxin C		BIA-O1589
Octadecanoyl-L-homoserine lactone	C18-HSI, N-Octadecanoyl-L-homoserine lactone	BIA-01501
Octanoyl-L-homoserine lactone	C8-HSL, OHL, N-Octanoyl-L-homoserine lactone	BIA-01496
Oleandomycin	Amimycin, Matromycin, PA 105	BIA-01304
Oligomycin A		BIA-01059
Oligomycin B		BIA-O1060
Oligomycin C	12-Deoxyoligomycin A	BIA-01061
Oligomycin D	Rutamycin, 26-demethyloligomycin A, A 272, RR 32705, Rutamycin A	BIA-01438
Oligomycin E	26-hydroxy-28-oxooligomycin A	BIA-01439
Ophiobolin A	Cochliobolin A, Ophiobolin, Ophiobalin	BIA-O1063
Ophiobolin B	Cochliobolin B, Zizanin B, Ophiobolsin A	BIA-O1064
Ophiobolin C	Zizanin A	BIA-01199
Orfamide A		BIA-O1430
Orfamide B		BIA-01431
Orsellinic acid	2,4-dihydrox-6-methylbenzoic acid; 6-methylbeta-Resorcylic acid; Orcinolcarboxylic acid; Orsellic acid+O47	BIA-01657
Orsellinic acid dimethylether	2,4-Dimethoxy-6-methylbenzoic acid; 4,6-dimethoxy-o-toluic acid	BIA-01659
Ostreogrycin A	Mikamycin A, Pristinamycin IIA, Stephylomycin M1, Streptogramin A, Syncothrecin A, Synergistin A1, Virginiamycin M1, Vernamycin A, 14752-2, E129A, PA 114A, 1745Z3A, 547C, Factor M	BIA-01131
(+)Oxanthromicin		BIA-O1627
Oxindole	2-Indolinone, 2-Hydroxyindole	BIA-01735
7-Oxostaurosporine	7-Oxostaurosporine, BMY 41950, RK 1409	BIA-01137



Product Name	Synonyms	Code No.
Oxychloroaphine	Oxychloraphin, Phenazine-1-carboxyamide, Xanthoraphine	BIA-O1527
Oxytetracycline	Terramycin	BIA-01336
Oxytetracycline hydrochloride	5-Hydroxytetracycline hydrochlride, Terramycin hydrochloride, Oxytetrin, Tetran hydrochloride	BIA-01507
Padanamide A	Actinoramide A	BIA-P1639
Palitantin		BIA-P1701
Paraherquamide A	VM 29919	BIA-P1065
Paraherquamide E	VM 54159, 14-Deoxyparaherquamide A	BIA-P1118
Parvodicin complex	A 40926 complex	BIA-P1372
Paxilline		BIA-P1271
PC-766B		BIA-P1554
Penigequinolone A		BIA-P1066
Penitrem A	Tremortin A	BIA-P1272
Penicolinate A		BIA-P1629
Pentostatin	2'-Deoxycoformycin, Covidaribine, ADAI, CI 825, d-Cof, NSC 218321, PD-ADI, YK 176	BIA-P1273
Pestalotin	6-Hydroxy-3-methoxy-2-decen-5-olide, LL-P880 alpha	BIA-P1067
Petromurin C		BIA-P1648
PF1163A		BIA-P1703
PF1163B		BIA-P1704
Phanerosporic acid		BIA-P1691
Phenelfamycin E	LL-E 19020, Ganefromycin-a	BIA-P1289
Phloroglucinol	1,3,5-trihydroxybenzene	BIA-P1379
Phomopsin A		BIA-P1193
Piericidin A	Shaoguanmycin B, MT 1882-I, SN 198E, IT 143D, Piericidin A1	BIA-P1069
Pimaricin	Natamycin, A 5283, Delvolan, Delvocid, Myprozine, Natacyn, Natafucin, Pimafucin, Pimafugin, A5263, CL 12625, E235	BIA-P1210
Pimecrolimus		BIA-P1385
Pimprinine	5-(3-Indolyl)-2-methyloxazole, WS 30581C, APHE 3	BIA-P1070
Pipacycline	Mepicycline	BIA-P1473
Piperafizine A	3,6-Dibenzylidene-1-methyl-2,5-dioxopiperazine	BIA-P1156
Pirlimycin		BIA-P1459
Pirlimycin hydrochloride	U 57930E	BIA-P1504
Platencin		BIA-P1178
Platensimycin		BIA-P1177



Product Name	Synonyms	Code No.
Pleuromutilin	Drosophilin B, A 40104C	BIA-P1204
Pneumocandin B0		BIA-P1274
Polymyxin E complex	Colistin, Colimycin M, Belcomycin, Colymycin, Torazin	BIA-P1319
Pravastatin sodium	Mevalotin, CS 514, SQ 3100	BIA-P1275
Prodigiosin		BIA-P1194
Pseudoerythromycin A enol ether		BIA-P1349
Pseudomonic acid	Mupirocin, Bactroban, Eismycin, BRL 4910A, Y 11633	BIA-P1206
Pseurotin A		BIA-P1104
Psoromic acid	Parellic acid; Sulcatic acid; Sqamaric acid	BIA-P1675
Puromycin	Achromycin, Stillomycin, Stylomycin, CL 13900, 3123L, P638, Bacterenomycin	BIA-P1230
Puromycin aminonucleoside	3'-Dimethylamino-3'-deoxyadenosine	BIA-P1222
Puromycin dihydrochloride	Stylomycin dihydrochloride, CL 13900 dihydrochloride, CL16536, NSC 3055, P638 dihydrochloride.	BIA-P1221
Pyoluteorin		BIA-P1393
Pyrenophorol	(-)-Pyrenophorol, Helmidiol	BIA-P1407
Pyridomycin	U24544, Antibiotic U24544, Erizomycin	BIA-P1556
Pyrocoll		BIA-P1588
Pyrrole-2-carboxylic acid	Mialine, Minaline, NCS 48130	BIA-P1572
Quadrone	(-)-Quadrone	BIA-Q1428
Questiomycin A	2-Amino-3H-phenoxazin-3-one, 2- Aminophenoxazone, AV Toxin C, NSC 94945	BIA-Q1525
Quinaldopeptin	BMY 28662, BU 3845T	BIA-Q1072
Quinolactacin A1		BIA-Q1073
Quinomycin A	Echinomycin, Actinoleukin, 1491, 59266, X 948, X 53III	BIA-Q1102
Quinupristin mesylate		BIA-Q1354
Quinupristin-Dalfopristin mesylate complex	Synercid complex, Dalfopristin-Quinupristin complex	BIA-Q1388
Radicicol	Monorden	BIA-R1148
Ramoplanin complex		BIA-R1375
Rapamycin	Sirolimus, AY 22989, SIIA 9268A	BIA-R1183
Rebeccamycin		BIA-R1075
Resistoflavine	A 3733Y, resistoflavin	BIA-R1192
Resistomycin	Croceomycin, Geliomycin, Heliomycin, Itamycin, 11-98, A 3733A, X 340	BIA-R1076



Product Name	Synonyms	Code No.
Retapamulin	SB 275833	BIA-R1491
Reticulol	6,8-Dihydroxy-7-methoxy-3-methylisocoumarin	BIA-R1077
Reveromycin A		BIA-R1078
Reveromycin B		BIA-R1079
Reveromycin C		BIA-R1080
Reveromycin D		BIA-R1081
Ridaforolimus	AP 23573, MK 8669, 42-Dimethylphosphinate-rapamycin	BIA-R1450
Ristocetin A sulfate	Ristocetin, Ristomycin III, Spontin, Riston	BIA-R1113
RK-682	TAN 1364B, CI 010	BIA-R1082
Rolitetracycline	Abricycline, Pyrrolidinylmethyltetracycline, SQ 15659, Transcycline, Velacycline	BIA-R1460
Roquefortine C	Roquefortine	BIA-R1083
Roquefortine E		BIA-R1105
Roseoflavin	8-Dimethylaminoriboflavin, Roseoflavine	BIA-R1535
Roxithromycin	Erythromycin 9-(-O-[2-methoxyethoxy]methyloxime)	BIA-R1315
(-)-Rugulosin	Radicalisin	BIA-R1452
(+)-Rugulosin	Radicalisin	BIA-R1201
Rugulotrosin A		BIA-R1453
Saccharocarcin A		BIA-S1134
Saccharocarcin B		BIA-S1135
Salinomycin	Eustin, AHR 3096, K 364, 61477	BIA-S1307
Salinomycin sodium		BIA-S1540
Sancycline hydrochloride	6-Demethyl-6-deoxytetracycline hydrochloride, NSC 51812	BIA-S1534
Sandramycin		BIA-S1211
Sartorypyrone A		BIA-S1636
Sch 38519		BIA-S1292
Sch 725674		BIA-S1293
Sclerotigenin		BIA-S1678
Selamectin		BIA-S1530
Setomimycin		BIA-S1611
Setosusin		BIA-S1084
Siccanin	CS 280, SI 23548	BIA-S1421
Simvastatin	MK-733	BIA-S1276
Sinapic acid	3,5-Dimethoxy-4-hydroxycinnamic acid; 4- Hydroxy-3,5-dimethoxycinnamic acid; NSC 59261; Sinapinic acid; Synapitic acid	BIA-S1730



Product Name	Synonyms	Code No.
Sinefungin	A 9145, RP 32232	BIA-S1376
Siomycin A	Mutabilycin, Sporangiomycin, 6741-21, Mutabillicin	BIA-S1136
Skyrin	Endothianin; Rhodophyscin; Skirin	BIA-S1662
Spinosyn A	Lepicidin A, A 83543A, LY 232105	BIA-S1337
Spinosyn A 17- pseudoaglycone	A 83543A pseudoglycone	BIA-S1593
Spinosyn A aglycone		BIA-S1595
Spinosyn D	Lepicidin D, A 83543D	BIA-S1338
Spinosyn D 17- pseudoaglycone	A 83543D pseudoaglycone	BIA-S1594
Spinosyn D aglycone		BIA-S1596
3'-Ethoxy-5,6- dihydrospinosyn J pseudoaglycone		BIA-E1597
3'-Ethoxy-5,6- dihydrospinosyn J		BIA-E1583
3'-Ethoxyspinosyn L 17- pseudoaglycone		BIA-E1598
3'-Ethoxyspinosyn L		BIA-E1586
Spiramycin I	Foromacidin A	BIA-S1317
Spirohexenolide A		BIA-S1698
Spirolaxine		BIA-S1692
Sporidesmolide complex		BIA-S1602
Sporidesmolide I		BIA-S1603
Sporidesmolide II		BIA-S1604
Sporidesmolide III		BIA-S1605
Sporidesmolide V		BIA-S1622
Stachybotrylactam	2-deoxy F1839A	BIA-S1085
Stauprimide	N-Benzoyl-7-oxostaurosporine	BIA-S1226
Staurosporine	AM 2282, M 193	BIA-S1086
Steffimycin B	U 40615	BIA-S1087
Sterigmatocystin		BIA-S1213
Stictic acid	NSC 87511; Scopularic acid; Pseudopsoromic acid; Stereocaulonic acid; Stictaic acid	BIA-S1673
Streptonigrin	Bruneomycin, Nigrin, Rufocromomycin, Valacidin, RP 5278	BIA-S1107
Streptozotocin	Zanosar, NSC85998, U9889, 1006-60	BIA-S1186
Sulbactam sodium	Penicillanic acid 1,1-dioxide sodium	BIA-S1565
Sulochrin		BIA-S1089



Product Name	Synonyms	Code No.
Sultriecin	BU 3285T	BIA-S1090
Tacrolimus	Fujimycin, FK506, FR900506, Tskubaenolide	BIA-T1184
TAN 1364B	CI 010, 3-hexadecanoyl-5-hydroxymethyltetronic acid.	BIA-T1544
TAN 420C	Dihydroherbimycin C	BIA-T1039
TAN 420E	Dihydroherbimycin A, NK 86-0084	BIA-T1037
Teicoplanin A2-2		BIA-T1509
Teicoplanin A2-3		BIA-T1510
Teicoplanin A2-4		BIA-T1511
Teicoplanin A2-5		BIA-T1512
Teicoplanin A3-1	L 17054	BIA-T1513
Teicoplanin complex	Teichomycin, Tecoplanin, Targocid, Teicomid, 8327A, DL 507IT, L 12507, MDL 507, MW 1900	BIA-T1187
Teleocidin A1	Lyngbyatoxin, Lyngbyatoxin A, Teleocidin A 1	BIA-T1429
Telithromycin		BIA-T1316
Telomycin	A 128-HYP, A 128-OP	BIA-T1179
Temsirolimus		BIA-T1386
Tenellin		BIA-T1566
Tenuazonic acid	Vivotoxin	BIA-T1277
Ternatin		BIA-T1397
Terphenyllin		BIA-T1200
Terrecyclic Acid	Terrecyclic acid A	BIA-T1560
Terreic acid	(-)-Terreic acid	BIA-T1695
Terrein	(+) Terrein, NSC 291308	BIA-T1408
Tetracycline	Achromycin, Ambramycin	BIA-T1334
Tetracycline hydrochloride	Achromycin, (-)-Tetracycline hydrochloride, Economycin, Neocycline B, Hostacyclin	BIA-T1505
Tetradecanoyl-L-homoserine lactone	C14-HSL, tDHL, N-Tetradecanoyl-L-homoserine lactone	BIA-T1499
Tetrahydrolipstatin	Orlipastat, Orlistat	BIA-T1320
Tetranactin		BIA-T1287
Tetromycin A		BIA-T1180
Tetromycin B		BIA-T1181
Thiamphenicol	Thiocymetin, Thiophenicol, Win 5062-2, NSC 522822	BIA-T1486
Thielavin A		BIA-T1091
Thielavin B		BIA-T1092
Thiocillin I	44-O-Demethylthiocillin II	BIA-T1529
Thiolutin	N-acetylpyrrothine, Farcinicine, Acetopyrrothine	BIA-T1138



Product Name	Synonyms	Code No.
Thiostrepton	Bryamycin, Thiactin, Alaninamide, X 146, A 8506, 6761-31	BIA-T1158
Tiamulin		BIA-T1321
Tiamulin hydrogen fumarate		BIA-T1322
Tigecycline	Glycylcycline, GAR 936, 9-t- Butylglycylamidominocycline	BIA-T1371
Tildipirosin		BIA-T1569
Tilmicosin	20-Deoxy-20-(3,5-dimethylpiperidin-1-yl)-desmycosin, EL-870	BIA-T1323
Tilmicosin phosphate	20-Deoxy-20-(3,5-dimethylpiperidin-1-yl)-desmycosin phosphate	BIA-T1324
Toxoflavin	1-Methylreumycin, PKF118-310, Xanthrothricin	BIA-T1522
Toyocamycin	Cyanotubercidin, Unamycin B, Vengicide, E 212, Antibiotic 1037, E 212, Anhygroscopin B, Naritheracin	BIA-T1310
TPU-0037A	30-Demethyllydicamycin	BIA-T1048
TPU-0037C	8-Dehydroxy-30-demethyllydicamycin	BIA-T1049
Triacetylphloroglucinol		BIA-T1390
Trichostatin A	A 300I	BIA-T1108
Trichostatin C	145-A	BIA-T1093
Trinactin	AKD-1D, S 3466B	BIA-T1094
TS 155-2	TS 155-2	BIA-T1291
Tubercidin	7-Deazaadenosine, XK 101-1, NSC 56408, Sparsomycin A, U 10071	BIA-T1516
Tubermycin B	Phenazine-1-carboxylic acid, X-Pigment, Shenqinmycin	BIA-T1524
Tulathromycin	Tulathromycin A	BIA-T1370
Tunicamycin complex		BIA-T1095
Tylosin	Dehydrorelomycin, Tylosin A	BIA-T1549
Tyrocidine complex		BIA-T1609
Tyrothricin	Bactralycin, Dermotricine	BIA-T1610
UCN-01	7-Hydroxystaurosporine	BIA-U1096
UCN-02		BIA-U1097
UK-1		BIA-U1290
Umirolimus	Biolimus, Biolimus A9, TRM 986	BIA-U1383
Unguinol	Yasimin; tris-dechloronidulin	BIA-U1668
Unguisin A		BIA-U1682
Unguisin B		BIA-U1683



Product Name	Synonyms	Code No.
Urocanic acid	Imidazole-4-acrylic acid; 4-Imidazolylacrylic acid; 5-Imidazoleacrylic acid; NSC 66357; Urocaninic acid	BIA-U1734
Usnic acid	Usninic acid, Carbonusninic acid, Usno	BIA-U1380
Validamycin A	Antibiotic T 7545A	BIA-V1561
Valinomycin		BIA-V1114
Valnemulin		BIA-V1492
Valnemulin hydrochloride		BIA-V1537
Vancomycin hydrochloride	Balcoran, Diatracin, Fibrantin, Hanomycin, Ledervan, Lyphocin, Vancoled, Vancocin, Vancocine	BIA-V1190
Venturicidin A	Aabomycin A1	BIA-V1098
Venturicidin B	Aabomycin A2	BIA-V1099
Verrucofortine	Fructigenine B, Verrucosine, Verrucozine	BIA-V1175
Verruculogen		BIA-V1191
Violacein	Anorosin	BIA-V1327
Virginiamycin B	Ostreogrycin B, Pristinamycin IA, Streptogramin B, Syncothrecin B1, Synergistin B, Vernamycin Balpha, Virginiamycin 1A, NSC 125176, 14725-1, PA 114B, RP 12535	BIA-V1132
Virginiamycin complex	Cebin V, Eskalin V, Eskamicin, Stafac, Stephylomycin, Mikamycin, Ostreogrycin, Patricin, Pristinamycin, Streptogramin, Vernamycin.	BIA-V1188
Virginiamycin S1	Staphylomycin S, PA 114B2, Antibiotic 899, A1745Z3B, Factor S	BIA-V1152
Viridicatin	2,3-dihydroxy-4-phenylquinoline	BIA-V1139
Viridicatol		BIA-V1681
Viridicatumtoxin	NSC 159628	BIA-V1447
Vulpinic acid	Vulpic acid; Methylpulvinic acid	BIA-V1677
Wortmannin	KY 12420	BIA-W1224
Zaragozic acid A	Squalestatin A, Squalestatin S1, L 694599	BIA-Z1424
a-Zearalanol	Ralgro, Zearanol, Zeranol, alpha-Zearalanol, alpha-Zeranol	BIA-Z1405
β-Zearalanol	Taleranol, beta-Zearanol, beta-Zeranol	BIA-Z1410
Zearalanone	(S)-Zearalanone, P 1502, Zanone	BIA-Z1440
a-Zearalenol	α-Zearalenol	BIA-Z1141
β-Zearalenol	(-)-beta-Zearalenol, beta-Trans-Zearalenol	BIA-Z1403
Zearalenone	Mycotoxin F2, Toxin F2	BIA-Z1142
Zotarolimus		BIA-Z1387



