

PRODUCT INFORMATION

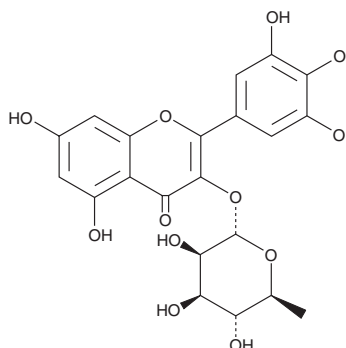


Myricitrin

Item No. 26902

CAS Registry No.: 17912-87-7
Formal Name: 3-[[6-deoxy- α -L-mannopyranosyl]oxy]-5,7-dihydroxy-2-(3,4,5-trihydroxyphenyl)-4H-1-benzopyran-4-one
Synonyms: Myricitrin, Myricitrine, Myricitroside, NSC 19803

MF: C₂₁H₂₀O₁₂
FW: 464.4
Purity: \geq 98%
UV/Vis.: λ_{max} : 259, 354 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Plant/*Myrica rubra* bark



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Myricitrin is supplied as a crystalline solid. A stock solution may be made by dissolving the myricitrin in the solvent of choice, which should be purged with an inert gas. Myricitrin is soluble in the organic solvent DMSO at a concentration of approximately 2 mg/ml.

Myricitrin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, Myricitrin should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Myricitrin has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Myricitrin is a flavonoid that has been found in *C. menyharthii* leaf extracts and has diverse biological activities.^{1,2} It is active against *B. subtilis*, *E. coli*, *K. pneumoniae*, *S. aureus*, and *C. albicans* (MIC = 0.25 mg/ml for all).¹ Myricitrin inhibits acetylcholinesterase (AChE) and α -glucosidase *in vitro* (IC₅₀s = 65 and 79 μ g/ml, respectively). It inhibits LPS-induced production of TNF- α and enhances LPS-induced RANTES production in RAW 264.7 cells when used at concentrations of 0.2 and 1 mM.²

References

1. Aderogba, M.A., Ndhkala, A.R., Rengasamy, K.R., *et al.* Antimicrobial and selected *in vitro* enzyme inhibitory effects of leaf extracts, flavonols and indole alkaloids isolated from *Croton menyharthii*. *Molecules* **18**(10), 12633-12644 (2013).
2. Shimosaki, S., Tsurunaga, Y., Itamura, H., *et al.* Anti-allergic effect of the flavonoid myricitrin from *Myrica rubra* leaf extracts *in vitro* and *in vivo*. *Nat. Prod. Res.* **25**(4), 374-380 (2011).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/07/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM