

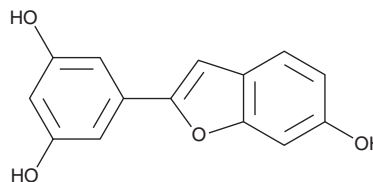
PRODUCT INFORMATION



Moracin M

Item No. 42221

CAS Registry No.: 56317-21-6
Formal Name: 5-(6-hydroxy-2-benzofuranyl)-1,3-benzenediol
Synonym: Veraphenol
MF: $C_{14}H_{10}O_4$
FW: 242.2
Purity: $\geq 98\%$
Supplied as: A solid
Storage: -20°C
Stability: ≥ 4 years
Item Origin: Synthetic



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

Laboratory Procedures

Moracin M is supplied as a solid. A stock solution may be made by dissolving the moracin M in the solvent of choice, which should be purged with an inert gas. Moracin M is soluble (≥ 10 mg/ml) in ethanol and DMSO.

Description

Moracin M is a polyphenol that has been found in *M. australis* and has diverse biological activities.¹⁻³ It is an inhibitor of phosphodiesterase 4D2 (PDE4D2) and PDE4B2 (IC_{50} s = 1.9 and 4.5 μM , respectively).¹ Moracin M induces cell death in P388 leukemia cells (IC_{50} = 24.8 μM).² It inhibits IL-1 β -induced increases in the levels of phosphorylated ERK and JNK in A549 lung cancer cells when used at concentrations of 30 or 50 μM .³ Moracin M (50 and 60 μM , respectively) inhibits LPS-induced increases in nitric oxide (NO) and inducible nitric oxide synthase (iNOS) levels in MH-S mouse alveolar macrophages. It also inhibits LPS-induced increases in the number of neutrophils, alveolar macrophages, and dendritic cells in bronchoalveolar lavage fluid (BALF), the thickness of alveolar walls, and the levels of NF- κB in the lungs in a rat model of acute lung injury when administered at a dose of 60 mg/kg.

References

1. Chen, S.-K., Zhao, P., Shao, Y.-X., *et al.* Moracin M from *Morus alba* L. is a natural phosphodiesterase-4 inhibitor. *Bioorg. Med. Chem. Lett.* **22**(9), 3261-3264 (2012).
2. Ferlinhayati, Syah, Y.M., Juliawaty, L.D., *et al.* Phenolic constituents from the wood of *Morus australis* with cytotoxic activity. *Z. Naturforsch. C. J. Biosci.* **63**(1-2), 35-39 (2008).
3. Lee, J.H., Ko, H.J., Woo, E.-R., *et al.* Moracin M inhibits airway inflammation by interrupting the JNK/c-Jun and NF- κB pathways *in vitro* and *in vivo*. *Eur. J. Pharmacol.* **783**, 64-72 (2016).

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.

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