

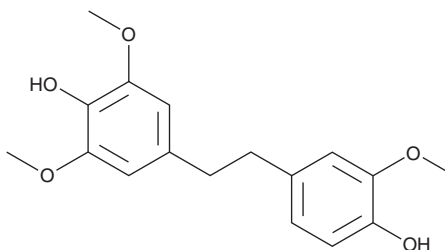
PRODUCT INFORMATION



Dendrophenol

Item No. 42115

CAS Registry No.: 108853-14-1
Formal Name: 4-[2-(4-hydroxy-3-methoxyphenyl)ethyl]-2,6-dimethoxy-phenol
Synonyms: Aloifol II, Moscatilin
MF: C₁₇H₂₀O₅
FW: 304.3
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Plant/*Dendrobium moniliforme* (L.) Sw.



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

Laboratory Procedures

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

Description

Dendrophenol is a polyphenol that has been found in *D. nobile* and has diverse biological activities.¹⁻³ It decreases viability of, and induces cell cycle arrest at the S phase in, HCT116 colorectal cancer cells when used at a concentration of 10 μM.¹ Dendrophenol (3 or 10 μM) inhibits the migration of MDA-MB-231 breast cancer cells.² It inhibits LPS-induced increases in inducible nitric oxide synthase (iNOS), COX-2, hypoxia-inducible factor-1α (HIF-1α), and NF-κB levels and NF-κB nuclear translocation in RAW 264.7 macrophages when used at a concentration of 100 μM.³ Dendrophenol (50 or 100 mg/kg per day) reduces tumor size without affecting body weight in an HCT116 mouse xenograft model.¹ It decreases total lung weight in an MDA-MB-231 mouse xenograft model when administered at a dose of 100 mg/kg per day.²

References

1. Chen, T.-H., Pan, S.-L., Guh, J.-H., *et al.* Moscatilin induces apoptosis in human colorectal cancer cells: A crucial role of c-Jun NH2-terminal protein kinase activation caused by tubulin depolymerization and DNA damage. *Clin. Cancer Res.* **14(13)**, 4250-4258 (2008).
2. Pai, H.-C., Chang, L.-H., Peng, C.-Y., *et al.* Moscatilin inhibits migration and metastasis of human breast cancer MDA-MB-231 cells through inhibition of Akt and Twist signaling pathway. *J. Mol. Med. (Berl)* **91(3)**, 347-356 (2013).
3. Liu, Y.-N., Pan, S.-L., Peng, C.-Y., *et al.* Moscatilin repressed lipopolysaccharide-induced HIF-1α accumulation and NF-κB activation in murine RAW264.7 cells. *Shock* **33(1)**, 70-75 (2010).

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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