

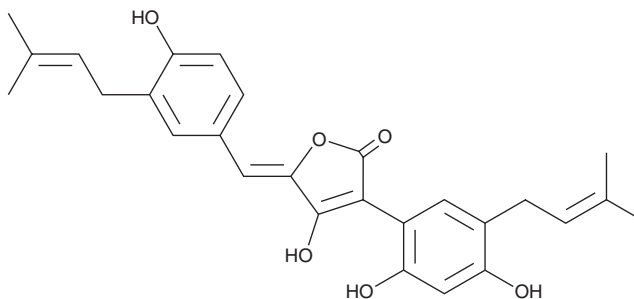
PRODUCT INFORMATION



Aspulvinone O

Item No. 29959

CAS Registry No.: 914071-54-8
Formal Name: 3-[2,4-dihydroxy-5-(3-methyl-2-buten-1-yl)phenyl]-4-hydroxy-5-[[4-hydroxy-3-(3-methyl-2-buten-1-yl)phenyl]methylene]-2(5H)-furanone
MF: C₂₇H₂₈O₆
FW: 448.5
Purity: ≥85%
UV/Vis.: λ_{max}: 249, 383 nm
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Fungus/*Aspergillus* sp.



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

Laboratory Procedures

Aspulvinone O is supplied as a solid. A stock solution may be made by dissolving the aspulvinone O in the solvent of choice, which should be purged with an inert gas. Aspulvinone O is soluble in ethanol, methanol, DMSO, and dimethyl formamide.

Description

Aspulvinone O is a fungal metabolite that has been found in *P. variotti* and has antioxidant and anticancer activities.^{1,2} It scavenges 2,2-diphenyl-1-picrylhydrazyl (DPPH; Item No. 14805) radicals in a cell-free assay (IC₅₀ = 11.6 μM).¹ Aspulvinone O inhibits aspartate transaminase 1 (GOT1; K_d = 3.32 μM) and is cytotoxic to PANC-1, AsPC-1, and SW1990 pancreatic cancer cells (IC₅₀s = 20.54-26.8 μM).² It reduces the oxygen consumption rate (OCR) and induces apoptosis in SW1990 cells. Aspulvinone O (2.5 and 5 mg/kg) reduces tumor growth in an SW1990 mouse xenograft model.

References

1. Zhang, P., Li, X.-M., Wang, J.-N., *et al.* New butenolide derivatives from the marine-derived fungus *Paecilomyces variotii* with DPPH radical scavenging activity. *Phytochem. Lett.* **11**, 85-88 (2015).
2. Sun, W., Luan, S., Qi, C., *et al.* Aspulvinone O, a natural inhibitor of GOT1 suppresses pancreatic ductal adenocarcinoma cells growth by interfering glutamine metabolism. *Cell Commun. Signal.* **17(1)**, 111 (2019).

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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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