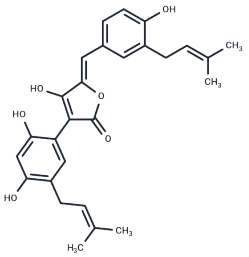
Data Sheet (Cat.No.T36179)

TargetMol

Aspulvinone O

Chemical Properties



CAS No. : 914071-54-8

Formula: C27H28O6

Molecular Weight: 448.515

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

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 radicals in a cell-free assay (IC50 = 11.6 μM).1 Aspulvinone O inhibits aspartate transaminase 1 (GOT1; Kd = 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.
Targets(IC50)	Others,Reactive Oxygen Species

Solubility Information

Solubility	Methanol: Soluble Ethanol: Soluble DMSO: Soluble DMF: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2296 mL	11.1478 mL	22.2955 mL
5 mM	0.4459 mL	2.2296 mL	4.4591 mL
10 mM	0.223 mL	1.1148 mL	2.2296 mL
50 mM	0.0446 mL	0.223 mL	0.4459 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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).
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).

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