

Protectin D1

Chemical Properties

CAS No. : 660430-03-5

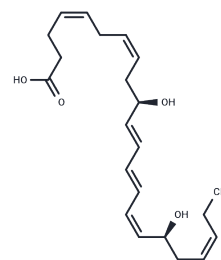
Formula: C₂₂H₃₂O₄

Molecular Weight: 360.49

Store at low temperature, Keep away from direct sunlight

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description	Protectin D1 (Neuroprotectin D1) is a neuroprotectin produced by neuronal cells and is a potential cardioprotective agent. Protectin D1 attenuates myocardial ischemia/reperfusion injury and inhibits imiquimod-induced psoriasis-like skin inflammation by modulating the PI3K/AKT signaling pathway.
Targets(IC50)	HIF/HIF Prolyl-Hydroxylase, Akt, Caspase, Endogenous Metabolite, Interleukin, PI3K, ROS, MicroRNA

Solubility Information

Solubility	DMSO: 50 mg/mL (138.7 mM), Sonication is recommended. PBS (pH 7.2): 0.1 mg/mL (0.28 mM), Sonication is recommended. Ethanol: 50 mg/mL (138.7 mM), Sonication is recommended. DMF: 50 mg/mL (138.7 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.774 mL	13.870 mL	27.740 mL
5 mM	0.5548 mL	2.774 mL	5.548 mL
10 mM	0.2774 mL	1.387 mL	2.774 mL
50 mM	0.0555 mL	0.2774 mL	0.5548 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,et al. Protectin D1 Alleviates Myocardial Ischemia/Reperfusion Injury by Regulating PI3K/AKT Signaling Pathway. J Cardiovasc Transl Res. 2023 Aug 14.

Park KD,et al. Protectin D1 reduces imiquimod-induced psoriasiform skin inflammation. Int Immunopharmacol. 2021 Sep;98:107883.

Liu H,et al. Protectin D1 inhibits TLR4 signaling pathway to alleviate non-alcoholic steatohepatitis via upregulating IRAK-M. Free Radic Biol Med. 2024 Jan;210:42-53.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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