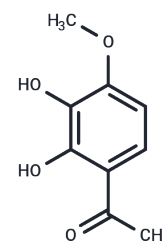


2,3-Dihydroxy-4-methoxyacetophenone

Chemical Properties

CAS No. :	708-53-2
Formula:	C ₉ H ₁₀ O ₄
Molecular Weight:	182.17
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	2,3-Dihydroxy-4-methoxyacetophenone (2',3'-Dihydroxy-4'-methoxyacetophenone) is a natural product, it improves cognitive function and may be helpful for the treatment of Alzheimer's disease.
Targets(IC50)	Calcium Channel
In vivo	Oral administered of 2,3-dihydroxy-4-methoxyacetophenone (1, 10, 20, 40 and 50mg/kg) to amnesic mice induced by scopolamine. In Morris water maze test, 2,3-dihydroxy-4-methoxyacetophenone (50mg/kg) improved the impairment of spatial memory induced by scopolamine. 2,3-Dihydroxy-4-methoxyacetophenone protect HT22 cells on glutamate induced cell-death in a dose-dependent manner (EC50 value: 10.94 μM). Furthermore, 2,3-dihydroxy-4-methoxyacetophenone was found to inhibit [Ca(2+)] accumulation in HT22 cells and had antioxidative activity. 2,3-dihydroxy-4-methoxyacetophenone exert neuroprotective and cognitive-enhancing activities through its antioxidant activity. 2,3-dihydroxy-4-methoxyacetophenone improves cognitive function and may be helpful for the treatment of Alzheimer's disease.

Solubility Information

Solubility	DMSO: 22.5 mg/mL (123.51 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (10.98 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.4894 mL	27.4469 mL	54.8938 mL
5 mM	1.0979 mL	5.4894 mL	10.9788 mL
10 mM	0.5489 mL	2.7447 mL	5.4894 mL
50 mM	0.1098 mL	0.5489 mL	1.0979 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

Weon J B , Ko H J , Ma C J . The ameliorating effects of 2,3-dihydroxy-4-methoxyacetophenone on scopolamine-induced memory impairment in mice and its neuroprotective activity[J]. Bioorganic & Medicinal Chemistry Letters, 2013, 23(24):6732-6736.

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