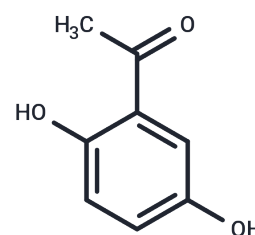


2,5-Dihydroxyacetophenone

Chemical Properties

CAS No. :	490-78-8
Formula:	C ₈ H ₈ O ₃
Molecular Weight:	152.15
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	1. 2,5-Dihydroxyacetophenone (Quinacetophenone) possess anti-anxiety, and neuroprotective qualities. 2. 2,5-Dihydroxyacetophenone (Quinacetophenone) treatment can induce a sustained activation of JNK, ERK1/2, and p38 MAPKs, it also can potentiate the pro-apoptotic and anti-proliferative effects of bortezomib in U266 cells. 3. 2,5-Dihydroxyacetophenone (Quinacetophenone) has anti-inflammatory activity in activated macrophages, raising the possibility that this compound has a therapeutic potential for inflammatory conditions. 4. 2,5-Dihydroxyacetophenone (Quinacetophenone) is an uncompetitive inhibitor of murine tyrosinase (K _i 0.28mM), it strongly inhibits both melanogenesis and cellular tyrosinase activity in vitro in 3-isobutyl-1-methylxanthin-stimulated B16 mouse melanoma cells or in vivo in zebrafish and mouse models.
Targets(IC50)	ERK,NF-κB,Tyrosinase

Solubility Information

Solubility	DMSO: 262.5 mg/mL (1725.27 mM),Sonication is recommended. Chloroform, Dichloromethane, Ethyl Acetate, Acetone, etc.: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (65.72 mM),Solution. 10% DMSO+90% Saline: < 10 mg/mL (65.72 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. <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	6.5725 mL	32.8623 mL	65.7246 mL
5 mM	1.3145 mL	6.5725 mL	13.1449 mL
10 mM	0.6572 mL	3.2862 mL	6.5725 mL
50 mM	0.1314 mL	0.6572 mL	1.3145 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

Han Y , Jung H W , Lee J Y , et al. 2,5-Dihydroxyacetophenone Isolated from Rehmanniae Radix Preparata Inhibits Inflammatory Responses in Lipopolysaccharide-Stimulated RAW264.7 Macrophages[J]. Journal of Medicinal Food, 2012, 15(6):505-510.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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