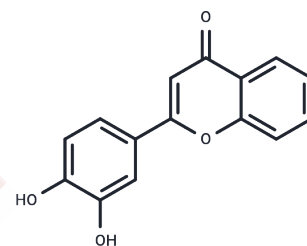


3,4-Dihydroxyflavone

Chemical Properties

CAS No. :	4143-64-0
Formula:	C ₁₅ H ₁₀ O ₄
Molecular Weight:	254.24
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	3,4-Dihydroxyflavone Acts as an Antioxidant and Antiapoptotic Agent .
Targets(IC50)	Others,Histamine Receptor
In vitro	Treatment with 3,4-DHF increased the ICM cell number and reduced intracellular ROS production and apoptotic cell numbers.?When O(2) tension was decreased from 20% (high tension) to 5% (low tension), embryo development rates were doubled regardless of 3,4-DHF treatment[1].
Cell Research	Blastocyst development, total cell and inner cell mass (ICM) numbers, intracellular levels of reactive oxygen species (ROS), apoptotic indices and gene expression levels were examined before and after treatment of day 2 bovine embryos (≥2-4 cells) with various concentrations of 3,4-DHF or SOD for 6 days[1].

Solubility Information

Solubility	DMSO: 245 mg/mL (963.66 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (39.33 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (39.33 mM),Solution. <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	3.9333 mL	19.6665 mL	39.3329 mL
5 mM	0.7867 mL	3.9333 mL	7.8666 mL
10 mM	0.3933 mL	1.9666 mL	3.9333 mL
50 mM	0.0787 mL	0.3933 mL	0.7867 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

Lee K S , Kim E Y , Jeon K , et al. 3,4-Dihydroxyflavone Acts as an Antioxidant and Antiapoptotic Agent to Support Bovine Embryo Development In Vitro[J]. Journal of Reproduction & Development, 2011, 57(1):127-134.

Hossain M K , Choi H Y , Hwang J S , et al. Antiviral activity of 3,4'-dihydroxyflavone on influenza a virus[J]. Journal of Microbiology, 2014, 52(6):521-526.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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