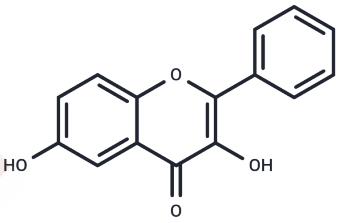
Data Sheet (Cat.No.T7982)

TargetMol

3,6-Dihydroxyflavone

Chemical Properties



CAS No. : 108238-41-1

Formula: C15H10O4

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	3,6-Dihydroxyflavone suppresses the epithelial-mesenchymal transition in breast cancer cells by inhibiting the Notch signaling pathway.
Targets(IC50)	Apoptosis,Others
In vitro	3,6-Dihydroxyflavone(3,6-DHF) could effectively inhibit EMT in BC cells in vitro and in vivo.?3,6-DHF effectively inhibits the formation and proliferation of BCSCs, and consequently reduces the tumor-initiating capacity of tumor cells in NOD/SCID mice.? Optical in vivo imaging of cancer metastasis showed that 3,6-DHF administration suppresses the lung metastasis of BC cells in vivo.?Further studies indicated that 3,6-DHF down-regulates Notch1, NICD, Hes-1 and c-Myc, consequently decreasing the formation of the functional transcriptional unit of NICD-CSL-MAML, causing Notch signaling inactivation in BC cells.?Over-expression of Notch1 or inhibition of miR-34a significantly reduced the inhibitory effects of 3,6-DHF on EMT, CSCs, as well as cells migration and invasion in BC cells[1].
Cell Research	Cells were cultured in six-well plates until they reached 100% confluence. A vertical or horizontal wound was gently created in monolayers using a 20 μl sterile pipette tip. The cells were then washed for 3 times with growth medium to remove the detached cells, and the medium was added with fresh medium treated with 3,6-DHF. Images were captured using an inverted microscope and camera at designed times to assess the inhibition of wound closure[1].

Solubility Information

Solubility	DMSO: 250 mg/mL (983.32 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 (7.87 mM),Sonication is recommended. *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.*

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

Chen J , Chang H , Peng X , et al. 3,6-dihydroxyflavone suppresses the epithelial-mesenchymal transition in breast cancer cells by inhibiting the Notch signaling pathway[J]. Scientific Reports, 2016, 6:28858.
Voicescu M , Bandula R . 3,6-diHydroxyflavone/bovine serum albumin interaction in cyclodextrin medium: Absorption and emission monitoring[J]. Spectrochimica Acta Part A Molecular & Biomolecular Spectroscopy, 2015, 138:628-636.