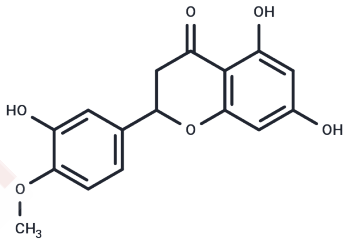
Data Sheet (Cat.No.T12667)

TargetMol

(Rac)-Hesperetin

Chemical Properties



CAS No. : 69097-99-0

Formula: C16H14O6

Molecular Weight: 302.28

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	(Rac)-Hesperetin is the racemic mixture of hesperetin. Hesperetin is a potent, broad-spectrum inhibitor of human UGT activity and an apoptosis inducer. (Rac)-Hesperetin inhibits protein tyrosine phosphatase 1B (IC_{50} = 20.16 μM).
Targets(IC50)	Apoptosis,Bcl-2 Family,NF-κB,Autophagy,p38 MAPK,ROS

Solubility Information

Solubility	DMSO: 100 mg/mL (330.82 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3082 mL	16.541 mL	33.0819 mL
5 mM	0.6616 mL	3.3082 mL	6.6164 mL
10 mM	0.3308 mL	1.6541 mL	3.3082 mL
50 mM	0.0662 mL	0.3308 mL	0.6616 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

Arya A, et al. Bioflavonoid hesperetin overcome bicalutamide induced toxicity by co-delivery in novel SNEDDS formulations: Optimization, in vivo evaluation and uptake mechanism. Mater Sci Eng C Mater Biol Appl. 2017 Feb 1;71:954-964

Liu D, et al. Inhibitory Effect of Hesperetin and Naringenin on Human UDP-Glucuronosyltransferase Enzymes: Implications for Herb-Drug Interactions. Biol Pharm Bull. 2016;39(12):2052-2059.

Shagirtha K, et al. Neuroprotective efficacy of hesperetin against cadmium induced oxidative stress in the brain of rats. Toxicol Ind Health. 2016 Nov 1. pii: 0748233716665301

Li Q, et al. Hesperetin Induces Apoptosis in Human Glioblastoma Cells via p38 MAPK Activation. Nutr Cancer. 2019 Jul 11:1-8.

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