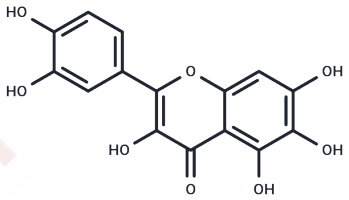
Data Sheet (Cat.No.T8114)

TargetMol

Quercetagetin

Chemical Properties



CAS No. : 90-18-6

Formula: C15H10O8

Molecular Weight: 318.24

Storage: Keep away from direct sunlight
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	Quercetagetin (6-Hydroxyquercetin) (6-Hydroxyquercetin) is the major flavonoid isolated from Citrus unshiu. It is a moderately potent and selective, cell-permeable pim-1 kinase inhibitor (IC50: 0.34 μM).
Targets(IC50)	Pim
In vitro	Quercetagetin inhibits PIM2, PKA, and RSK2 (IC50s: 3.45, 21.2, and 2.82 μM). Quercetagetin (0.1, 1, 10, and 100 μM, 72 hours) inhibits growth of RWPE2 prostate cancer cells with average ED50 is 3.8 μM [2].
In vivo	Quercetagetin significantly inhibits UVB-induced skin cancer development. Topical application of 4 or 20 nmol of Quercetagetin to mouse skin reduces tumor incidence by 32.0% and 46.7%, respectively [3].
Cell Research	Cell Line: RWPE2 prostate cancer cells. Concentration: 0.1, 1, 10, and 100 μM. Incubation Time: 72 hours [2]
Animal Research	Animal Model: SKH-1 hairless mice model. Dosage: 4 or 20 nmol. Administration: Topical application; 28 weeks [3]

Solubility Information

Solubility	DMSO: 250 mg/mL (785.57 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: 4 mg/mL (12.57 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	3.1423 mL	15.7114 mL	31.4228 mL
5 mM	0.6285 mL	3.1423 mL	6.2846 mL
10 mM	0.3142 mL	1.5711 mL	3.1423 mL
50 mM	0.0628 mL	0.3142 mL	0.6285 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

Yang X, et al. Isolation and identification of an antioxidant flavonoid compound from citrus-processing by-product. J Sci Food Agric. 2011 Aug 15;91(10):1925-7.
Holder S, et al. Characterization of a potent and selective small-molecule inhibitor of the PIM1 kinase. Mol Cancer Ther. 2007 Jan;6(1):163-72.
Baek S, et al. Structural and functional analysis of the natural JNK1 inhibitor quercetagetin. J Mol Biol. 2013 Jan 23; 425(2):411-23.