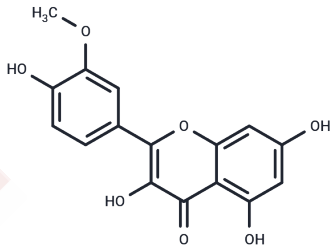
Data Sheet (Cat.No.T2836)

TargetMol

Isorhamnetin

Chemical Properties



CAS No. : 480-19-3

Formula: C16H12O7

Molecular Weight: 316.26

Appearance: no data available

Storage: keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Isorhamnetin (3-methylquercetin) is the methylated metabolite of quercetin. Quercetin is an important dietary flavonoid with in vitro antioxidant activity. Isorhamnetin prevents endothelial cell injuries from oxidized LDL via inhibition of lectin-like ox-LDL receptor-1 upregulation, interference of ox-LDL-mediated intracellular signaling pathway (p38MAPK activation, NF-kappaB nuclear translocation, eNOS expression) and the antioxidant activity of isorhamnetin. Isorhamnetin prevents endothelial dysfunction, superoxide production, and overexpression of p47phox induced by angiotensin II. Isorhamnetin appears to be a potent drug against esophageal cancer due to it's in vitro potential to not only inhibit proliferation but also induce apoptosis of Eca-109 cells.
Targets(IC50)	MEK,Endogenous Metabolite,PI3K

Solubility Information

Solubility	DMSO: 100 mg/mL (316.2 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.162 mL	15.8098 mL	31.6196 mL
5 mM	0.6324 mL	3.162 mL	6.3239 mL
10 mM	0.3162 mL	1.581 mL	3.162 mL
50 mM	0.0632 mL	0.3162 mL	0.6324 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.

Reference

Han X, et al. Biomol Ther (Seoul). 2015 Jul;23(4):357-66.
Kuang Y, Chai Y, Xu L, et al. Glabrone as a specific UGT1A9 probe substrate and its application in discovering the inhibitor glycycoumarin. European Journal of Pharmaceutical Sciences. 2021: 105786.
Kuang Y, Chai Y, Xu L, et al. Glabrone as a specific UGT1A9 probe substrate and its application in discovering the inhibitor glycycoumarin[J]. European Journal of Pharmaceutical Sciences. 2021: 105786.
Kim K Y, Kang Y M, Lee A, et al.Hydroethanolic Extract of Lepidium apetalum Willdenow Alleviates Dextran Sulfate Sodium-Induced Colitis by Enhancing Intestinal Barrier Integrity and Inhibiting Oxidative Stress and Inflammasome Activation.Antioxidants.2024, 13(7): 795.

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