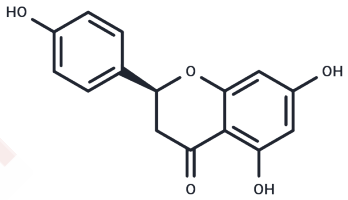
Data Sheet (Cat.No.T2838)

TargetMol

Naringenin

Chemical Properties



CAS No. : 480-41-1

Formula: C15H12O5

Molecular Weight: 272.25

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Naringenin (NSC-11855) is a flavanone that is considered to have a bioactive effect on human health as antioxidant, free radical scavenger, antiinflammatory, carbohydrate metabolism promoter, immunity system modulater. This substance has also been shown to repair DNA.
Targets(IC50)	Reactive Oxygen Species,Endogenous Metabolite,Cytochromes P450,Influenza Virus, PPAR
In vitro	In both normoglycemic and non-insulin-dependent diabetes mellitus rat models, oral administration of 50 mg/kg Naringenin resulted in a significant decrease in plasma glucose levels.
In vivo	Naringenin, found in grapefruit juice, has been demonstrated to inhibit the human cytochrome P450 isoform CYP1A2. This can adversely alter the pharmacokinetics of several common agents in human (or directly homologous) hosts, potentially rendering otherwise harmless substances carcinogenic.
Cell Research	Naringenin is dissolved in DMSO and diluted in cell culture medium. The cells are rinsed with PBS and grown in a medium containing various concentrations of naringenin (50, 100, 150, 200, 250, 300 μM). The solvent DMSO treated cells are served as control. After 24 hrs of treatment, the medium is removed and replaced by another medium containing MTT. Cell viability is measured using the MTT assay[1].

Solubility Information

Solubility	DMSO: 100 mg/mL (367.31 mM),Sonication is recommended. Ethanol: 5 mg/mL (18.37 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.6731 mL	18.3655 mL	36.7309 mL
5 mM	0.7346 mL	3.6731 mL	7.3462 mL
10 mM	0.3673 mL	1.8365 mL	3.6731 mL
50 mM	0.0735 mL	0.3673 mL	0.7346 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

Fuhr U, et al. Br J Clin Pharmacol, 1993, 35(4):431-436.
Jang S A, Hwang Y H, Kim T, et al. Anti-Osteoporotic and Anti-Adipogenic Effects of the Water Extract of Drynaria roosii Nakaike in Ovariectomized Mice Fed a High-Fat Diet. Molecules. 2019, 24(17): 3051
Ortiz-Andrade RR, et al. Diabetes Obes Metab, 2008, 10(11), 1097-1104.
Hoser J, Weglinska G, Samsel A, et al.Modulation of the Respiratory Epithelium Physiology by Flavonoids–Insights from 16HBEσcell Model.International Journal of Molecular Sciences.2024, 25(22): 11999.
Jang S A, Hwang Y H, Kim T, et al. Anti-Osteoporotic and Anti-Adipogenic Effects of the Water Extract of Drynaria roosii Nakaike in Ovariectomized Mice Fed a High-Fat Diet[J]. Molecules. 2019, 24(17): 3051.