

Naringin

Chemical Properties

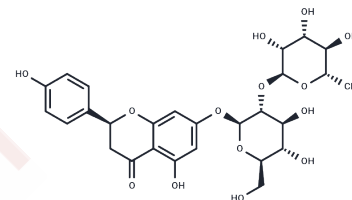
CAS No. : 10236-47-2

Formula: C₂₇H₃₂O₁₄

Molecular Weight: 580.53

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	Naringin (Naringoside), a flavanone glycoside, exerts various of pharmacological effects such as blood lipid lowering, antioxidant activity, anticancer activity, and inhibition of cytochrome P450 enzymes.
Targets(IC50)	Mitophagy,Endogenous Metabolite,Autophagy,Cytochromes P450
In vivo	The Lethal Dose 50 for mice:1650 mg/kg.
Cell Research	HBZY-1 cells are plated into 96-well plates and pretreated with various concentrations (1, 5, 10, 25, 50, 100 μM) of naringin for 2 h. Then cells are treated with 30 mM glucose for 24 h. The control group is added sterile normal saline in the same volume. After treatment, all the wells are incubated with 20 μL of 5 mg/ml MTT for 4 h at 37°C. Subsequently, 100 μL of DMSO are used to dissolve the formed formazan crystals after removal of the supernatant. The result is recorded at 490 nm on a microplate reader[1].

Solubility Information

Solubility	Ethanol: 1 mg/mL (1.72 mM),Sonication is recommended. H ₂ O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 250 mg/mL (430.64 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7226 mL	8.6128 mL	17.2256 mL
5 mM	0.3445 mL	1.7226 mL	3.4451 mL
10 mM	0.1723 mL	0.8613 mL	1.7226 mL
50 mM	0.0345 mL	0.1723 mL	0.3445 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

Ueng YF, et al. *Life Sci*, 1999, 65(24), 2591-2602.

Chen Q Z, Li Y, Shao Y, et al. TGF- β 1/PTEN/PI3K signaling plays a critical role in the anti-proliferation effect of tetrandrine in human colon cancer cells. *International Journal of Oncology*. 2017, 50(3): 1011-1021

Schindler R, et al. *J Nutr*, 2006, 136(6), 1477-1482.

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

Kandhare AD, et al. *Fitoterapia*, 2012, 83(4), 650-659.

Mir-Cerdà A, Granados M, Saurina J, et al. Green Extraction of Antioxidant Compounds from Olive Tree Leaves Based on Natural Deep Eutectic Solvents. *Antioxidants*. 2023, 12(5): 995.

Cho S C, Shaw S Y. Comparison of the inhibition effects of naringenin and its glycosides on LPS-induced inflammation in RAW 264.7 macrophages. *Molecular Biology Reports*. 2024, 51(1): 56.

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.

Romers T, Sentellas S, Saurina J, et al. Potential of high-throughput FIA-MS/MS and LC-MS/MS polyphenolic profiling to assess tea authenticity. Application to tea adulterations with chicory. *Microchemical Journal*. 2024: 111723.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel: 781-999-4286 E_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481