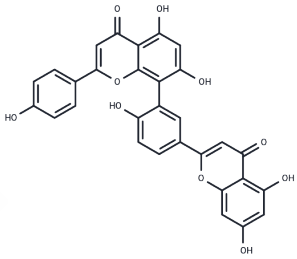
Data Sheet (Cat.No.T3417)

TargetMol

Amentoflavone

Chemical Properties



CAS No. : 1617-53-4

Formula: C30H18O10

Molecular Weight: 538.46

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	Amentoflavone (3',8''-Biapigenin), as a potent inhibitor of CYP3A4 and CYP2C9, can interact with many other medications. CYP3A4 and CYP2C9 are proteins used for drug metabolism in the body. Amentoflavone also is an inhibitor of human cathepsin B. It has antimalarial activity in trials significant affinities towards the Delta-1, kappa opioid receptors (as an antagonist) and binds to benzodiazepine receptors. Amentoflavone may be a potential lead for a new type of anti-inflammatory agents having the dual inhibitory activity of group II phospholipase A2 and cyclooxygenase. Amentoflavone and quercetin differentially exerted suppression of PGE2 biosynthesis via downregulation of COX-2/iNOS expression.
Targets(IC50)	Apoptosis,Reactive Oxygen Species,Opioid Receptor,GABA Receptor,Antibacterial, Antifungal,COX,Cytochromes P450,Phospholipase,ROS,RSV

Solubility Information

Solubility	DMSO: 34 mg/mL (63.14 mM),Sonication is recommended. Chloroform, Dichloromethane, Ethyl Acetate: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (3.71 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	1.8571 mL	9.2857 mL	18.5715 mL
5 mM	0.3714 mL	1.8571 mL	3.7143 mL
10 mM	0.1857 mL	0.9286 mL	1.8571 mL
50 mM	0.0371 mL	0.1857 mL	0.3714 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

Sakthivel KM, et al. Int Immunopharmacol. 2013 Nov;17(3):907-16.
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.
Lee JS, et al. Phytother Res. 2013 May;27(5):713-20.
Yang Y, et al. Nan Fang Yi Ke Da Xue Xue Bao. 2014 Jun;34(7):1035-8.
Zhang J, et al. Burns. 2014 Aug;40(5):922-9.
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.