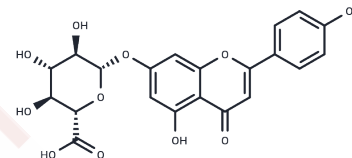


Apigenin-7-glucuronide

Chemical Properties

CAS No. :	29741-09-1
Formula:	C ₂₁ H ₁₈ O ₁₁
Molecular Weight:	446.36
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	Apigenin-7-glucuronide (Apigenin 7-O-glucuronide) possesses multiple activities, including antioxidant, anti-inflammatory, and aldose reductase inhibitory activities, it can inhibit MMP activities (IC ₅₀ s: 12.87, 22.39, 17.52, 0.27 μM for MMP-3, MMP-8, MMP-9, MMP-13, respectively).
Targets(IC ₅₀)	MMP
In vivo	Apigenin-7-O-β-D-glucuronide (AG) suppressed the release of nitric oxide (NO), prostaglandin E ₂ (PGE ₂), and tumour necrosis factor-α (TNF-α) in LPS-stimulated RAW 264.7 macrophages in a dose-dependent manner without affecting cell viability. Additionally, AG suppressed LPS-induced mRNA expression of inducible nitric oxide synthase (iNOS), cyclooxygenase-2 (COX-2), and TNF-α. AG treatment decreased the translocation of c-Jun into the nucleus and decreased activator protein-1 (AP-1)-mediated luciferase activity through the inhibition of both p38 mitogen-activated protein kinase (MAPK) and extracellular signal-regulated kinase (ERK) phosphorylation [2].

Solubility Information

Solubility	DMSO: 50 mg/mL (112.02 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: 2 mg/mL (4.48 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2403 mL	11.2017 mL	22.4034 mL
5 mM	0.4481 mL	2.2403 mL	4.4807 mL
10 mM	0.224 mL	1.1202 mL	2.2403 mL
50 mM	0.0448 mL	0.224 mL	0.4481 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

Crasci L, et al. Correlating In Vitro Target-Oriented Screening and Docking: Inhibition of Matrix Metalloproteinases Activities by Flavonoids. *Planta Med.* 2017 Jul;83(11):901-911.

Hu W, et al. Apigenin-7-O- β -D-glucuronide inhibits LPS-induced inflammation through the inactivation of AP-1 and MAPK signaling pathways in RAW 264.7 macrophages and protects mice against endotoxin shock. *Food Funct.* 2016 Feb;7(2):1002-13.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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