

Baicalin methyl ester

Chemical Properties

CAS No. : 82475-03-4

Formula: C₂₂H₂₀O₁₁

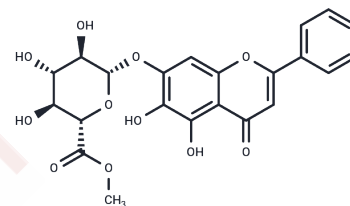
Molecular Weight: 460.39

Keep away from moisture, Keep away from direct sunlight

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	Baicalin methyl ester shows inhibitory effects on the Avian Myeloblastosis Virus reverse transcriptase (AMV-RT).
Targets(IC50)	Anti-infection
In vitro	One hundred-ninety flavonoids and 75 alkaloids were studied for their inhibitory effects on the Avian Myeloblastosis Virus reverse transcriptase (AMV-RT) by using (rA) n-p(dT) 12-18> or (rC) n-p(dG) 12-18> as a template-primer. Of the flavonoids tested, 6-hydroxyluteolin (50), pedalitin (52), 6-hydroxykaempferol (109) and quercetagenin (129), were the most potent inhibitors with IC ₅₀ :10 μM. Five other flavonoids, baicalein (19), Baicalin methyl ester (23), scutellarein (33), myricetin (126) and gossypetin (130), gave IC ₅₀ between 35 and 200 μM. The kinetic studies on 50, 126 and 130 gave the inhibitory constants k _i of 10, 94 and 90 μM, respectively, with respect to the substrate and 5, 200 and 100 μM, respectively, with respect to the template-primer. Structurally different alkaloids such as isoquinoline, indol, steroidal, quinolizidine, pyrrolizidine, pyridine and imidazole alkaloids were also investigated for the activity and berberine type alkaloids were shown to have a strong inhibitory activity.

Solubility Information

Solubility	DMSO: 45 mg/mL (97.74 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 (4.34 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	2.1721 mL	10.8604 mL	21.7207 mL
5 mM	0.4344 mL	2.1721 mL	4.3441 mL
10 mM	0.2172 mL	1.086 mL	2.1721 mL
50 mM	0.0434 mL	0.2172 mL	0.4344 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

Effects of Flavonoids and Alkaloids on Reverse Transcriptase Japanese Journal of Pharmacognosy , 1991 , 45 (3) : 240-254.

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