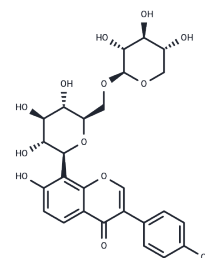


Puerarin 6''-O-Xyloside

Chemical Properties

CAS No. :	114240-18-5
Formula:	C ₂₆ H ₂₈ O ₁₃
Molecular Weight:	548.49
Storage:	Keep away from moisture, Store at low temperature Powder: -20°C for 3 years In solvent: -80°C for 1 year <i>Actual storage temperature shall be subject to the COA.</i>



Biological Description

Description	Puerarin 6''-O-xyloside possesses significant anti-osteoporotic activity on ovariectomy mice, it has significant antitumour activities, the mechanisms are related to increased levels of caspase-3, caspase-7, caspase-9 and Bax, and reduced levels Bcl-2.
Targets(IC50)	Apoptosis, Caspase
In vivo	The in vivo animal study showed that POS significantly inhibited tumour growth in A549 cells ($p < 0.01$). The POS has significant antitumour activities. The mechanisms are related to increased levels of caspase-3, caspase-7, caspase-9 and Bax, and reduced levels Bcl-2[1].
Animal Research	The 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide (MTT) assay was used to determine the cytotoxicity of POS (at 10, 20 and 40 μ M) in vitro, and xenograft nude mice were established to evaluate the antitumour effect of POS (at 40 mg/kg/d) in vivo by 15 days intraperitoneal injection (ip). To explore its mechanism of action, flow cytometry was performed to determine the pro-apoptotic effect of POS (at 10, 20 and 40 μ M). Subsequently, the expression of caspase-3, caspase-7, caspase-9, Bcl-2 and Bax in A549 cells were determined[1].

Solubility Information

Solubility	DMSO: 25 mg/mL (45.58 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 (3.65 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	1.8232 mL	9.1159 mL	18.2319 mL
5 mM	0.3646 mL	1.8232 mL	3.6464 mL
10 mM	0.1823 mL	0.9116 mL	1.8232 mL
50 mM	0.0365 mL	0.1823 mL	0.3646 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

Chen T , Chen H , Wang Y , et al. In vitro and in vivo antitumour activities of puerarin 6''-O-xyloside on human lung carcinoma A549 cell line via the induction of the mitochondria-mediated apoptosis pathway[J]. *Pharmaceutical Biology*.

Xu Y, Cai Q, Zhao C, et al. Gegen Qinlian Decoction Attenuates Colitis-Associated Colorectal Cancer via Suppressing TLR4 Signaling Pathway Based on Network Pharmacology and In Vivo/In Vitro Experimental Validation. *Pharmaceuticals*.2024, 18(1): 12.

Li H , Chen B , Pang G , et al. Anti-osteoporotic activity of puerarin 6''-O-xyloside on ovariectomized mice and its potential mechanism[J]. *Pharmaceutical Biology*, 2015, 54(1):1-7.

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