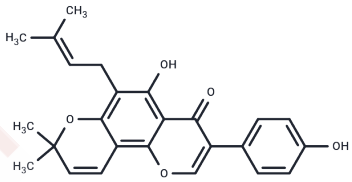
Data Sheet (Cat.No.T16407)

TargetMol

Osajin

Chemical Properties



CAS No. : 482-53-1

Formula: C25H24O5

Molecular Weight: 404.46

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	Osajin is the major bioactive iso avone present in the fruit of Maclura pomifera. It has antitumor, antioxidant, and anti-inflammatory activities.
Targets(IC50)	Apoptosis,Others
In vitro	Osajin shows growth inhibitory activity on six human cancer cell lines, including kidney, lung, prostate, breast, melanoma and colon cancer cells. Osajin obviously reduces the viability of human NPC cells in a dose-dependent manner. Osajin causes apoptosis in human NPC cells through multiple apoptotic pathways, including the extrinsic death receptor pathway, and intrinsic pathways relying on mitochondria and endoplasmic reticulum stress[1][2].
In vivo	The cardioprotective effects of osajin and pomiferin are attributed to their ability to suppress oxidative stress, coinciding with enhanced ventricular function. These compounds mitigate myocardial dysfunction induced by ischemia-reperfusion, evidenced by elevated levels of antioxidant enzymes and overall antioxidant activity[3].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4724 mL	12.3622 mL	24.7243 mL
5 mM	0.4945 mL	2.4724 mL	4.9449 mL
10 mM	0.2472 mL	1.2362 mL	2.4724 mL
50 mM	0.0494 mL	0.2472 mL	0.4945 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

Huang TT, et al. Activation of multiple apoptotic pathways in human nasopharyngeal carcinoma cells by the prenylated isoflavone, osajin. PLoS One. 2011 Apr 12;6(4):e18308.
Son IH, et al. Pomiferin, histone deacetylase inhibitor isolated from the fruits of Maclura pomifera. Bioorg Med Chem Lett. 2007 Sep 1;17(17):4753-5.
Florian T, et al. Effects of prenylated isoflavones osajin and pomiferin in premedication on heart ischemia-reperfusion. Biomed Pap Med Fac Univ Palacky Olomouc Czech Repub. 2006 Jul;150(1):93-100.

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