Data Sheet (Cat.No.T4S0969)

TargetMol

Obtusifolin

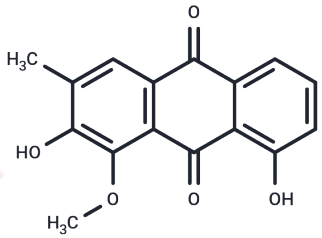
Chemical Properties

CAS No. : 477-85-0

Formula: C16H12O5

Molecular Weight: 284.26

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	1. Obtusifolin has antioxidant properties and improves chemically induced diabetes and its complications by modulation of oxidative stress. 2. Obtusifolin suppresses phthalate esters-mediated bone resorption, thus may be a novel anti-breast-cancer bone metastasis agent. 3. Obtusifolin has beneficial effects on the development of diabetic retinopathy via inhibition of accumulation of oxidatively modified DNA and nitrotyrosine in the retina, can help prevent vision loss in diabetic patients. 4. Obtusifolin and gluco-Obtusifolin produce significant antinociceptive action in rodent behavioral models of inflammatory/neuropathic pain, and that this activity is associated with modulation of neuroinflammation in spinal cord. 5. Gluco-Obtusifolin and its aglycone may be useful for the treatment of cognitive impairment, and that its beneficial effects are mediated, in part, by the enhancement of cholinergic signaling.
Targets(IC50)	Antioxidant,NF-κB

Solubility Information

Solubility	DMSO: 12.8 mg/mL (45.03 mM),Sonication is recommended. Chloroform, Dichloromethane, Ethyl Acetate, Acetone, etc.: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 1.28 mg/mL (4.5 mM),Solution. 10% DMSO+90% Saline: < 1.28 mg/mL (4.5 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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	3.5179 mL	17.5895 mL	35.1791 mL
5 mM	0.7036 mL	3.5179 mL	7.0358 mL
10 mM	0.3518 mL	1.759 mL	3.5179 mL
50 mM	0.0704 mL	0.3518 mL	0.7036 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

Hsu Y L , Tsai E M , Hou M F , et al. Obtusifolin Suppresses Phthalate Esters-Induced Breast Cancer Bone Metastasis by Targeting Parathyroid Hormone-Related Protein[J]. Journal of Agricultural & Food Chemistry, 2014, 62(49): 11933-40.