Data Sheet (Cat.No.T4S0878)

TargetMol

Prunetin

Chemical Properties

CAS No. :	552-59-0
Formula:	C16H12O5
Molecular Weight:	284.264
Storage:	Keep away from direct sunlight 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. Prunetin (Prunusetin) significantly reduces serum levels of inflammatory cytokines and mortality in mice challenged with lipopolysaccharide. 2. Prunetin mediates anti-obesity/adipogenesis effects by suppressing obesity-related transcription through a feedback mechanism that regulates the expression of adiponectin, adipoR1, adipoR2, and AMPK. 3. Prunetin and biochanin A are potent reducers of NF-κB and ERK activation, zonula occludens 1 tyrosine phosphorylation, and metalloproteinase-mediated shedding activity, which may account for the barrier-improving ability of these isoflavones. 4. Prunetin significantly suppresses ATP-induced mucin secretion from cultured RTSE cells; Prunetin inhibits the production of MUC5AC mucin protein induced by EGF or PMA from NCI-H292 cells; Prunetin also inhibits the expression of MUC5AC mucin gene induced by EGF or PMA from NCI-H292 cells.
Targets(IC50)	ERK,NF-κB,Dehydrogenase

Solubility Information

Solubility	DMSO: 125.00 mg/mL (439.73 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: < 10 mg/mL (35.18 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% (20% SBE-β-CD in Saline): < 10 mg/mL (35.18 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% Corn oil: < 10 mg/mL (35.18 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% Saline: < 10 mg/mL (35.18 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

Yang G , Ham I , Choi H Y . Anti-inflammatory effect of prunetin via the suppression of NF-κB pathway[J]. Food & Chemical Toxicology An International Journal Published for the British Industrial Biological Research Association, 2013, 58:124-132.