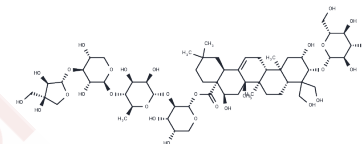


## Platycodin D

## Chemical Properties

CAS No. :	58479-68-8
Formula:	C57H92O28
Molecular Weight:	1225.32
Storage:	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	Platycodin D may stimulate TNF- $\alpha$ synthesis or inhibit degradation of TNF- $\alpha$ mRNA. Platycodin D (10/30 $\mu$ M) suppresses prostaglandin E2 production in rat peritoneal macrophages stimulated by the protein kinase C activator 12-O-tetradecanoyl phorbol 13-acetate (TPA). Platycodin D and D3 are useful as expectorant agents in the treatment of various airway diseases, they can increase mucin release from rat and hamster tracheal surface epithelial cell culture and also from intact rat trachea upon nebulization.
Targets(IC50)	AMPK,Prostaglandin Receptor,Wnt/beta-catenin

## Solubility Information

Solubility	DMSO: 45 mg/mL (36.73 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 (1.63 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

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	1mg	5mg	10mg
1 mM	0.8161 mL	4.0806 mL	8.1611 mL
5 mM	0.1632 mL	0.8161 mL	1.6322 mL
10 mM	0.0816 mL	0.4081 mL	0.8161 mL
50 mM	0.0163 mL	0.0816 mL	0.1632 mL

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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

Kwon OG, ET AL. The Effects of Platycodin D, a Saponin Purified from Platycodi Radix, on Collagen-Induced DBA/1J Mouse Rheumatoid Arthritis. *Evid Based Complement Alternat Med.* 2014;22014:954508.

Lee S J, Kim H W, Lee S, et al. Characterization of Saponins from Various Parts of *Platycodon grandiflorum* Using UPLC-QToF/MS. *Molecules.* 2022, 27(1): 107.

Chen T, et al. Protective effect of platycodin D on liver injury in alloxan-induced diabetic mice via regulation of Treg/Th17 balance. *Int Immunopharmacol.* 2015 Jun;26(2):338-48.

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