

## Methyl protodioscin

## Chemical Properties

CAS No. : 54522-52-0

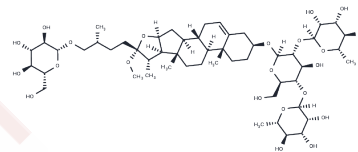
Formula: C52H86O22

Molecular Weight: 1063.23

Storage:

Keep away from moisture, Store at low temperature,  
Store under nitrogen, 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	Methyl protodioscin (Smilax saponin B) potentially increase HDL cholesterol while reducing LDL cholesterol and triglycerides. Methyl protodioscin has antitumor property. Methyl protodioscin induced apoptotic process in human A549 cells is closely associated with Mitochondrial membrane potential, caspase-3, and mitochondrial cytochrome c.
Targets(IC50)	Apoptosis

## Solubility Information

Solubility	DMSO: 250 mg/mL (235.13 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: 3.3 mg/mL (3.1 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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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	0.9405 mL	4.7027 mL	9.4053 mL
5 mM	0.1881 mL	0.9405 mL	1.8811 mL
10 mM	0.0941 mL	0.4703 mL	0.9405 mL
50 mM	0.0188 mL	0.0941 mL	0.1881 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

Ma W, et al. Methyl protodioscin increases ABCA1 expression and cholesterol efflux while inhibiting gene expressions for synthesis of cholesterol and triglycerides by suppressing SREBP transcription and microRNA 33a/b levels. *Atherosclerosis*. 2015 Apr;239(2):566-70.

Bai Y, et al. Methyl protodioscin induces G2/M cell cycle arrest and apoptosis in A549 human lung cancer cells. *Pharmacogn Mag*. 2014 Jul;10(39):318-24.

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