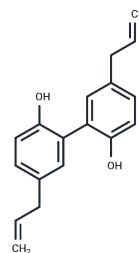


## Magnolol

## Chemical Properties

CAS No. :	528-43-8
Formula:	C <sub>18</sub> H <sub>18</sub> O <sub>2</sub>
Molecular Weight:	266.33
Appearance:	no data available
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year



## Biological Description

Description	Magnolol (5,5'-Diallyl-2,2'-biphenyldiol) is a dual agonist of RXR $\alpha$ (EC <sub>50</sub> =10.4 $\mu$ M) and PPAR $\gamma$ (EC <sub>50</sub> =17.7 $\mu$ M). It blocks TNF- $\alpha$ -induced NF-KB activation.
Targets(IC50)	NF- $\kappa$ B, Retinoid Receptor, Antibacterial, Autophagy, p53, PPAR
In vitro	Magnolol shows significant inhibitory activities against Trichophyton mentagrophytes, Microsporium gypseum, Epidermophyton floccosum, Aspergillus niger, Cryptococcus neoformans, and Candida albicans with minimum inhibitory concentrations (MIC) in a range of 25-100 $\mu$ g/mL.

## Solubility Information

Solubility	DMSO: 70 mg/mL (262.83 mM), Sonication is recommended. H <sub>2</sub> O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 49 mg/mL (183.98 mM), Sonication is recommended. (< 1 mg/mL refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.7547 mL	18.7737 mL	37.5474 mL
5 mM	0.7509 mL	3.7547 mL	7.5095 mL
10 mM	0.3755 mL	1.8774 mL	3.7547 mL
50 mM	0.0751 mL	0.3755 mL	0.7509 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.

### Reference

Ai J, et al. Pharmacology, 2001, 63(1), 34-41.

Kuang Y, Chai Y, Xu L, et al. Glabrone as a specific UGT1A9 probe substrate and its application in discovering the inhibitor glycycomarin. European Journal of Pharmaceutical Sciences. 2021: 105786.

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