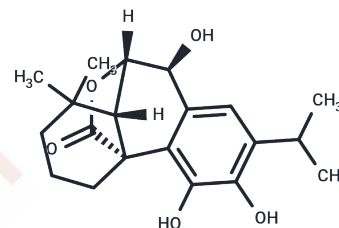


Rosmanol

Chemical Properties

CAS No. :	80225-53-2
Formula:	C ₂₀ H ₂₆ O ₅
Molecular Weight:	346.42
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	Rosmanol has antioxidant activity, it can activate the antioxidant response element. Rosmanol has biphasic modulation of GABAA receptors, demonstrates CNS activity in mouse models of antinociception, antidepressant and anxiolysis. Rosmanol potently induces apoptosis through both the mitochondrial apoptotic pathway and death receptor pathway in human colon adenocarcinoma COLO 205 cells. Rosmanol has anti-inflammatory activity, it potently inhibits lipopolysaccharide-induced iNOS and COX-2 expression through downregulating MAPK, NF-kappaB, STAT3 and C/EBP signaling pathways.
Targets(IC50)	Antioxidant, COX

Solubility Information

Solubility	Chloroform: Soluble, DMSO: 60 mg/mL (173.2 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: 5 mg/mL (14.43 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

	1mg	5mg	10mg
1 mM	2.8867 mL	14.4333 mL	28.8667 mL
5 mM	0.5773 mL	2.8867 mL	5.7733 mL
10 mM	0.2887 mL	1.4433 mL	2.8867 mL
50 mM	0.0577 mL	0.2887 mL	0.5773 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

Abdelhalim A, et al. Antidepressant, Anxiolytic and Antinociceptive Activities of Constituents from *Rosmarinus Officinalis* [J]. *J Pharm Pharm Sci.* 2015;18(4):448-59.

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Petiwala S M, Johnson J J. Diterpenes from rosemary (*Rosmarinus officinalis*): Defining their potential for anti-cancer activity[J]. *Cancer Letters,* 2015, 367(2):93-102.

Fischedick J T. Structure activity relationship of phenolic diterpenes from *Salvia officinalis* as activators of the antioxidant response element[J]. *Bioorganic & Medicinal Chemistry,* 2013, 21(9):2618-2622.

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