# Data Sheet (Cat.No.T7033)



### Rosmanol

# **Chemical Properties**

CAS No.: 80225-53-2

Formula: C20H26O5

Molecular Weight: 346.42

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

# **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)	

# **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.

Page 1 of 2 www.targetmol.com

#### 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.

Li T, Lu D, Yao C, et al. Kansl1 haploinsufficiency impairs autophagosome-lysosome fusion and links autophagic dysfunction with Koolen-de Vries syndrome in mice. Nature Communications. 2022, 13(1): 1-16.

Petiwala S M, Johnson J J. Diterpenes from rosemary (Rosmarinus officinalis): Defining their potential for anticancer 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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Page 2 of 2 www.targetmol.com