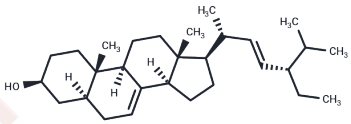
Data Sheet (Cat.No.TN1377)

TargetMol

α-Spinasterol

Chemical Properties



CAS No. : 481-18-5

Formula: C29H48O

Molecular Weight: 412.69

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	α-Spinasterol is a transient receptor potential vanilloid 1 (TRPV1) antagonist, has anti-inflammatory, antidepressant, antioxidant and antinociceptive effects. α-Spinasterol inhibits COX-1 andCOX-2 activities with IC50 values of 16.17 μM and 7.76 μM, respectively.
Targets(IC50)	Antibacterial,COX,TRP/TRPV Channel
In vivo	Oral administration of α-spinasterol reduced postoperative pain, when given as a pre- (0.5 h before incision) or post-treatment (0.5 h after incision), and reduced cell infiltration in the injured tissue.?α-Spinasterol also reduced the mechanical allodynia induced by partial sciatic nerve ligation and the mechanical and cold allodynia induced by paclitaxel.?Moreover, α-spinasterol inhibited COX-1 and COX-2 enzyme activities without altering the body temperature of animals.?Importantly, α-spinasterol did not alter spontaneous or forced locomotor activity.?Furthermore, it did not cause gastric damage or liver and kidney changes, nor did it alter cell viability in the cerebral cortex and spinal cord slices of mice.

Solubility Information

Solubility	H2O: insoluble, DMSO: insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4231 mL	12.1156 mL	24.2313 mL
5 mM	0.4846 mL	2.4231 mL	4.8463 mL
10 mM	0.2423 mL	1.2116 mL	2.4231 mL
50 mM	0.0485 mL	0.2423 mL	0.4846 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

Indiara, Brusco, Camila, et al. α-Spinasterol: a COX inhibitor and a transient receptor potential vanilloid 1 antagonist presents an antinociceptive effect in clinically relevant models of pain in mice.[J]. British Journal of Pharmacology, 2017.