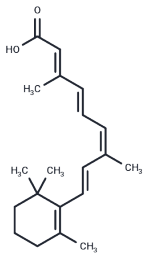
Data Sheet (Cat.No.T21497)

TargetMol

9-cis-Retinoic Acid

Chemical Properties



CAS No. : 5300-03-8

Formula: C20H28O2

Molecular Weight: 300.44

Storage: Keep away from direct sunlight,Store at low temperature
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	9-cis-Retinoic Acid (Alitretinoin) is a derivative of vitamin A. It is a RAR/RXR agonist with anticancer, antitumor, anti-inflammatory, and neuroprotective activities, induces apoptosis, regulates the cell cycle, and can be used to study advanced tumors.
Targets(IC50)	Apoptosis
In vitro	In CA 9-22 and NA cells, 9-cis-Retinoic acid (1 μM, 10 μM; 0 day, 1 day, 3 days, 5 days) significantly decreased proliferation[1].
In vivo	In male C57BL/6J mice (6-8 weeks old; 19-22 g), following bile duct ligation, treatment with 9-cis-Retinoic Acid (1 mg/kg; intravenous injection; once daily; for 10 days) significantly decreased serum ALT and AST levels and alleviated hepatic necrosis[3].

Solubility Information

Solubility	DMSO: 15 mg/mL (49.93 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3285 mL	16.6423 mL	33.2845 mL
5 mM	0.6657 mL	3.3285 mL	6.6569 mL
10 mM	0.3328 mL	1.6642 mL	3.3285 mL
50 mM	0.0666 mL	0.3328 mL	0.6657 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

Raul Rosas, et al. Retinoids Augment Thiazolidinedione PPARγ Activation in Oral Cancer Cells. Anticancer Res. 2020 Jun;40(6):3071-3080.
Hua Yang, et al. Effects of 9-cis-retinoic Acid on the Proliferation and Apoptosis of Cutaneous T-cell Lymphoma Cells. Anticancer Drugs. 2019 Jan;30(1):56-64.
Zhiqing Yuan, et al. 9-cis-retinoic Acid Elevates MRP3 Expression by Inhibiting Sumoylation of RXRα to Alleviate Cholestatic Liver Injury. Biochem Biophys Res Commun. 2018 Sep 3;503(1):188-194.