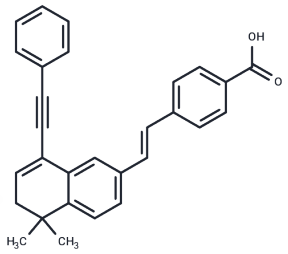
Data Sheet (Cat.No.T14689)

BMS493

Chemical Properties



CAS No. :	215030-90-3
Formula:	C29H24O2
Molecular Weight:	404.5
Storage:	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	BMS493 is an inverse agonist of the pan-retinoic acid receptor (RAR) that inhibits retinoic acid-induced differentiation, enhances the interaction of nuclear co-inhibitors with RARs, attenuates RA signaling, potentiates TPP-induced toxicity, and inhibits the increase in phospholipase A2 activity.
Targets(IC50)	Retinoid Receptor,Phospholipase
In vitro	Cells treated with BMS 493 (100 nM; 6 days) showed a twofold increase in the number of ALDHhi cells available for transplantation compared to untreated controls. Newly expanded ALDHhi cells exhibited increased numbers of CD34 and CD133-positive cells, along with a reduction in CD38 expression[1].
In vivo	In contrast to freshly isolated ALDHhi cells, 6-day expansion with or without BMS 493 generated progeny that were unable to reduce hyperglycemia after iPan transplantation into STZ-treated NOD/SCID mice[1].

Solubility Information

Solubility	DMSO: 30 mg/mL (74.17 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4722 mL	12.3609 mL	24.7219 mL
5 mM	0.4944 mL	2.4722 mL	4.9444 mL
10 mM	0.2472 mL	1.2361 mL	2.4722 mL
50 mM	0.0494 mL	0.2472 mL	0.4944 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

Elgamal RM, et al. BMS 493 Modulates Retinoic Acid-Induced Differentiation During Expansion of Human Hematopoietic Progenitor Cells for Islet Regeneration. Stem Cells Dev. 2018 Aug 1;27(15):1062-1075.
Yu Z, et al. Apoptosis induced by atRA in MEPM cells is mediated through activation of caspase and RAR. Toxicol Sci. 2006 Feb;89(2):504-9.