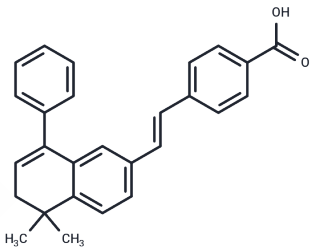
Data Sheet (Cat.No.T21714)

TargetMol

BMS453

Chemical Properties



CAS No. : 166977-43-1

Formula: C27H24O2

Molecular Weight: 380.48

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	BMS453 (BMS-189453), a synthetic retinoid, is a potent and selective agonist of RARβ and a potent testicular toxin. BMS453 inhibits breast cell growth predominantly through the induction of active TGFβ.
Targets(IC50)	Retinoid Receptor
In vitro	BMS453 (1 μM; 11 hours; 184 and HMEC cells) inhibits normal breast cell proliferation without significantly inducing apoptosis[2]. The RARβ-selective agonist (BMS453) significantly reduces T47D breast cancer cell migration to levels comparable to RA inhibition, unlike RARα- or RARγ-selective agonists (BMS753 and BMS961), indicating RARβ's role in RA-inhibited cell migration[3].

Solubility Information

Solubility	DMSO: 45 mg/mL (118.27 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6283 mL	13.1413 mL	26.2826 mL
5 mM	0.5257 mL	2.6283 mL	5.2565 mL
10 mM	0.2628 mL	1.3141 mL	2.6283 mL
50 mM	0.0526 mL	0.2628 mL	0.5257 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

J Y Chen, et al. RAR-specific agonist/antagonists which dissociate transactivation and AP1 transrepression inhibit anchorage-independent cell proliferation. EMBO J. 1995 Mar 15;14(6):1187-97.
L Yang, et al. The retinoic acid receptor antagonist, BMS453, inhibits normal breast cell growth by inducing active TGFbeta and causing cell cycle arrest. Oncogene. 2001 Nov 29;20(55):8025-35.
Marina Inés Flamini, Gauna G V , Sottile M L , et al. Retinoic acid reduces migration of human breast cancer cells: role of retinoic acid receptor beta[J]. Journal of Cellular and Molecular Medicine, 2014.