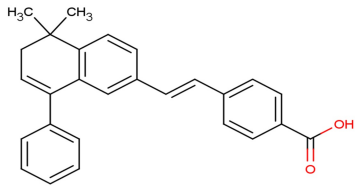
Data Sheet (Cat.No.T21714)

TargetMol
A DRUG SCREENING EXPERT

BMS 453

Chemical Properties



CAS No.:	166977-43-1
Formula:	C27H24O2
Molecular Weight:	380.48
Appearance:	white to beige powder
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	BMS453, 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.
In vitro	BMS453 (1 μM; 11 hours; 184 and HMEC cells) treatment inhibits the proliferation of normal breast cell growth without significantly inducing apoptosis[2]. The RARβ-selective agonist (BMS453), but not RARα- or RARγ-selective agonists (BMS753 and BMS961, respectively), significantly reduced the T47D breast cancer cell migration to levels comparable to inhibition by RA, indicating that RARβ is involved in RA-inhibited cell migration[3].

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.628 mL	13.141 mL	26.283 mL
5 mM	0.526 mL	2.628 mL	5.257 mL
10 mM	0.263 mL	1.314 mL	2.628 mL
50 mM	0.053 mL	0.263 mL	0.526 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. 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.

2. 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.

3. 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.

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