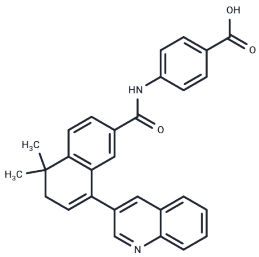
Data Sheet (Cat.No.T22192)

TargetMol

BMS 195614

Chemical Properties



CAS No. : 253310-42-8

Formula: C29H24N2O3

Molecular Weight: 448.51

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	BMS 195614 (BMS614) is a selective RARα antagonist. BMS 195614 can bind to the RARα subunit.
Targets(IC50)	Retinoid Receptor
In vitro	BMS 195614 reversed the induction effect of selective RARα agonists, AM580, AM80 and BMS 194753 on differentiation of the acute promyelocytic leukemia cell lines, NB4 and HL60 [1]. Treatment with retinoic acid (RA) (1 uM) for 72 hrs significantly reduced T47D breast cancer cells migration. But RA in combination with BMS 195614 did not affect the cell movement [2]. In cells of a bovine stromal-vascular fraction from intramuscular fat, BMS 195614 significantly diminished the anti-adipogenic effect of ATRA [3].
In vivo	BMS 195614 displayed poor in vivo activity in mice when administered orally. Treatment with BMS 195614 at oral doses for 1 month showed no inhibition to spermatogenesis [4]. Oral administration of BMS 195614 did not suppress spermatogenesis in mice [5].

Solubility Information

Solubility	DMSO: 30 mg/mL (66.89 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2296 mL	11.148 mL	22.296 mL
5 mM	0.4459 mL	2.2296 mL	4.4592 mL
10 mM	0.223 mL	1.1148 mL	2.2296 mL
50 mM	0.0446 mL	0.223 mL	0.4459 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

F. Christopher Zusi, Matthew V. Lorenzi and Valerie Vivat-Hannah. Selective retinoids and rexinoids in cancer therapy and chemoprevention. Drug Discovery Today, 2002, 7(23):1165-1174.
Flamini Marina Ines, Gauna Gisel Valeria, Sottile Mayra Lis, et al. Retinoic acid reduces migration of human breast cancer cells: role of retinoic acid receptor β. J. Cell. Mol. Med., 2014, 18(6): 1113-1123.
Nikolas Gunkel, Thorsten Meyer and John Michael Graettinger; N/A. Method of Modulating the Degree of Adipose Tissue Deposited Intramuscularly. US patent 20140094512A1. 2014 Apr. 3.
Sanny S. W. Chung, Rebecca A. D. Cuellar, Xiangyuan Wang, et al. Pharmacological Activity of Retinoic Acid Receptor Alpha-Selective Antagonists in Vitro and in Vivo. ACS Med. Chem. Lett., 2013, 4: 446-450.
Fern E. Murdoch and Erwin Goldberg. Male contraception: Another holy grail. Bioorg. Med. Chem. Lett., 2014, 24: 419-424.