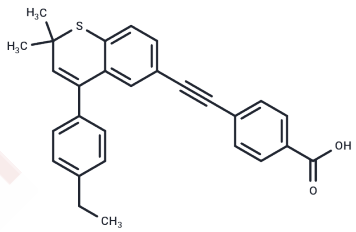
Data Sheet (Cat.No.T14143)

TargetMol

AGN 194310

Chemical Properties



CAS No. : 229961-45-9

Formula: C28H24O2S

Molecular Weight: 424.55

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	AGN 194310 (VTP-194310) is a pan-antagonist for retinoic acid receptors (RARs), with Kd values of 3 nM, 2 nM, and 5 nM for RARα, RARβ, and RARγ, respectively[1][2].
Targets(IC50)	Retinoid Receptor,Autophagy
In vitro	AGN194310 effectively inhibits colony formation in LNCaP, PC3, and DU-145 cells with IC50 values of 16 nM, 18 nM, and 34 nM, respectively[2]. At concentrations of 50 nM and 100 nM, both alone and combined with TTNPB, AGN194310 inhibits colony formation in these cell lines[2]. Additionally, treatment with AGN194310 (1 μM for 72 hours) results in 80% apoptosis in LNCaP cells[2].
In vivo	AGN 194310 (0.5 mg/kg/day; oral gavage; every day; for 10 days; female C57Bl/6J mice) treatment significantly increases granulocyte numbers across hematopoietic compartments and the frequency of granulocyte-progenitor cells in bone marrow[3].

Solubility Information

Solubility	DMSO: 50 mg/mL (117.77 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween-80+45% Saline: 1.67 mg/mL (3.93 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3554 mL	11.7772 mL	23.5544 mL
5 mM	0.4711 mL	2.3554 mL	4.7109 mL
10 mM	0.2355 mL	1.1777 mL	2.3554 mL
50 mM	0.0471 mL	0.2355 mL	0.4711 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

Johnson AT, et al. Synthesis and biological activity of high-affinity retinoic acid receptor antagonists. Bioorg Med Chem. 1999 Jul;7(7):1321-38.
Hammond LA, et al. Antagonists of retinoic acid receptors (RARs) are potent growth inhibitors of prostate carcinoma cells. Br J Cancer. 2001 Aug 3;85(3):453-62.
Walkley CR, et al. Retinoic acid receptor antagonism in vivo expands the numbers of precursor cells during granulopoiesis. Leukemia. 2002 Sep;16(9):1763-72.