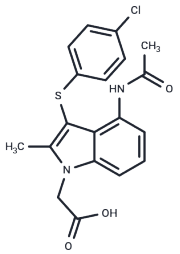
Data Sheet (Cat.No.T6399)

TargetMol

AZD1981

Chemical Properties



CAS No. : 802904-66-1

Formula: C19H17ClN2O3S

Molecular Weight: 388.87

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	AZD1981 is an effective and specific CRTh2 (DP2) receptor antagonist (IC50: 4 nM), showing >1000-fold selectivity over more than 340 other enzymes and receptors, including DP1. AZD1981 has been used in trials studying the treatment and basic science of Asthma, Postmenopausal, Pharmakokinetic, Asthma Patients, and Drug Interaction, among others.
Targets(IC50)	GPCR,Prostaglandin Receptor
In vitro	AZD1981, as a potent antagonist in a disease relevant cell system, inhibits DK-PGD2-induced CD11b expression in human eosinophils with IC50 of 10 nM. [1] AZD1981 blocks DP2-mediated shape change in human eosinophils and basophils in blood, as well as DP2-mediated chemotaxis of human Th2 cells and eosinophils. Moreover, AZD1981 also blocks the binding of [3H]PGD2 to mouse, rat, guinea pig, rabbit and dog recombinant DP2. [2]
In vivo	AZD1981 has high oral bioavailability in male sprague dawley rats. [1] In guinea pig hind limb model, AZD1981 (100 nM) completely inhibits DK-PGD2-induced eosinophil mobilization. [2]

Solubility Information

Solubility	Ethanol: < 1 mg/mL (insoluble or slightly soluble), H2O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 9 mg/mL (23.14 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 0.5 mg/mL (1.29 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	2.5716 mL	12.8578 mL	25.7155 mL
5 mM	0.5143 mL	2.5716 mL	5.1431 mL
10 mM	0.2572 mL	1.2858 mL	2.5716 mL
50 mM	0.0514 mL	0.2572 mL	0.5143 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

Luker T, et al. Bioorg Med Chem Lett. 2011, 21(21), 6288-6292.
Schmidt JA, et al. Br J Pharmacol. 2013, 168(7), 1626-1638.