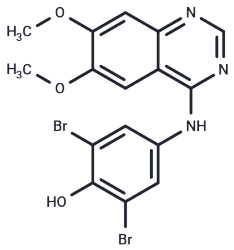
Data Sheet (Cat.No.T4657)

TargetMol

WHI-P97

Chemical Properties



CAS No. : 211555-05-4

Formula: C16H13Br2N3O3

Molecular Weight: 455.1

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	WHI-P97 is a rationally designed potent inhibitor of JAK-3. IC50 value: Target: JAK3 Treatment of mast cells with WHI-P97 inhibited the translocation of 5-lipoxygenase (5-LO) from the nucleoplasm to the nuclear membrane and consequently 5-LO-dependent leukotriene (LT) synthesis after IgE receptor/FcepsilonRI crosslinking by >90% at low micromolar concentrations. WHI-P97 did not directly inhibit the enzymatic activity of 5-LO, but prevented its translocation to the nuclear membrane without affecting the requisite calcium signal.
Targets(IC50)	JAK

Solubility Information

Solubility	DMSO: 60 mg/mL (131.84 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 mg/mL (2.2 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	2.1973 mL	10.9866 mL	21.9732 mL
5 mM	0.4395 mL	2.1973 mL	4.3946 mL
10 mM	0.2197 mL	1.0987 mL	2.1973 mL
50 mM	0.0439 mL	0.2197 mL	0.4395 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

Ji KA, Yang MS, Jou I, Shong MH, Joe EH.Thrombin induces expression of cytokine-induced SH2 protein (CIS) in rat brain astrocytes: involvement of phospholipase A2, cyclooxygenase, and lipoxygenase.Glia. 2004 Nov 1;48(2): 102-11.
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Wong WS, Leong KP.Tyrosine kinase inhibitors: a new approach for asthma.Biochim Biophys Acta. 2004 Mar 11; 1697(1-2):53-69.
Uckun FM, Sudbeck EA, Mao C, Ghosh S, Liu XP, Vassilev AO, Navara CS, Narla RK.Structure-based design of novel anticancer agents.Curr Cancer Drug Targets. 2001 May;1(1):59-71.
Sudbeck EA, Liu XP, Narla RK, Mahajan S, Ghosh S, Mao C, Uckun FM.Structure-based design of specific inhibitors of Janus kinase 3 as apoptosisinducing antileukemic agents.Clin Cancer Res. 1999 Jun;5(6):1569-82.
Chen C, Lu M, Lin S, et al. The nuclear gene rpl18 regulates erythroid maturation via JAK2-STAT3 signaling in zebrafish model of Diamond-Blackfan anemia[J]. Cell Death & Disease. 2020, 11(2): 1-11.