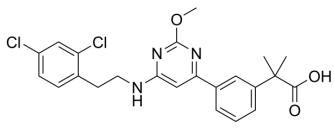
PGD2-IN-1

Cat. No.:	HY-101430
CAS No.:	885066-67-1
Molecular Formula:	$C_{23}H_{23}Cl_2N_3O_3$
Molecular Weight:	460.35
Target:	Prostaglandin Receptor
Pathway:	GPCR/G Protein
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 2 years -20°C 1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 25 mg/mL (54.31 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.1723 mL	10.8613 mL	21.7226 mL
5 mM	0.4345 mL	2.1723 mL	4.3445 mL
10 mM	0.2172 mL	1.0861 mL	2.1723 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (5.43 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

PGD2-IN-1 is an antagonist of DP extracted from patent WO 2006044732 A2, example 15 (d); has an IC_{50} of 0.3 nM.

IC_{50} & Target

IC50: 0.3 nM[1]

In Vitro

Prostaglandin D2 (PGD2) is a major inflammatory mediator implicated in asthma and allergic rhinitis. It is largely produced as the major cyclooxygenase metabolite upon allergen-provoked degranulation from mast cells. Blockage of PGD2 using DP antagonists has been shown to be effective at alleviating the symptoms of allergic rhinitis in multiple species and more specifically has been shown to inhibit the antigen-induced nasal congestion[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Lim, Sungtaek, et al. 2, 6-SUBSTITUTED-4-MONOSUBSTITUTEDAMINO-PYRIMIDINE AS PROSTAGLANDIN D2 RECEPTOR ANTAGONISTS. WO2006044732A2.

[2]. Mu L, et al. Understanding DP receptor antagonism using a CoMSIA approach. Bioorg Med Chem Lett. 2011 Jan 1;21(1):66-75.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA