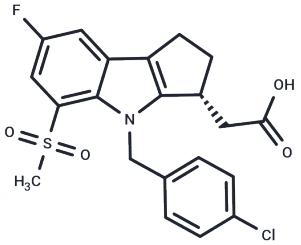
Data Sheet (Cat.No.T15712)

TargetMol

Laropiprant

Chemical Properties



CAS No. : 571170-77-9

Formula: C21H19ClFNO4S

Molecular Weight: 435.9

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	Laropiprant (MK-0524) is a potent and selective antagonist of prostaglandin D2 (PGD2) receptor (DP) such as and DP/DP1 receptor(Ki = 0.57 nM) and TP Receptor(Ki = 2.95 nM).
Targets(IC50)	Prostaglandin Receptor
In vitro	Laropiprant blocks DP receptor-dependent enhance in VASP phosphorylation, as well as inhibition of P-selectin expression, GPIIb/IIIa activation, and in vitro thrombus formation. Laropiprant antagonizes the increased platelet aggregation by TP and EP3 receptor activation. Laropiprant (1 μM) induces a significant inhibition of the aggregation but still counteracts the pronounced inhibition caused by PGD2 (30 nM) and BW245c (3 nM). Laropiprant (10 μM) and niacin inhibit in vitro thrombus formation[2].

Solubility Information

Solubility	DMSO: 250 mg/mL (573.53 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: 10 mg/mL (22.94 mM),Solution. 10% DMSO+90% Saline: < 10 mg/mL (22.94 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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	2.2941 mL	11.4705 mL	22.941 mL
5 mM	0.4588 mL	2.2941 mL	4.5882 mL
10 mM	0.2294 mL	1.1471 mL	2.2941 mL
50 mM	0.0459 mL	0.2294 mL	0.4588 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

Sturino CF, et al. Discovery of a potent and selective prostaglandin D2 receptor antagonist, [(3R)-4-(4-chloro-benzyl)-7-fluoro-5-(methylsulfonyl)-1,2,3,4-tetrahydrocyclopenta[b]indol-3-yl]-acetic acid (MK-0524). J Med Chem. 2007 Feb 22;50(4):794-806.

Philipose S, et al. Laropiprant Attenuates EP3 and TP Prostanoid Receptor-Mediated Thrombus Formation. PLoS One. 2012;7(8):e40222.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481