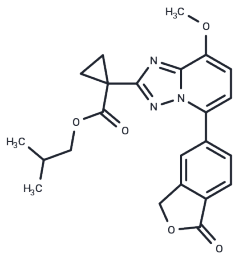
Data Sheet (Cat.No.T38002)

TargetMol

LEO 39652

Chemical Properties



CAS No. : 1445656-91-6

Formula: C23H23N3O5

Molecular Weight: 421.45

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	LEO 39652, a dual-soft PDE4 inhibitor, demonstrates potent inhibition of PDE4 subtypes A, B, C, and D with respective IC50 values of 1.2 nM, 1.2 nM, 3.0 nM, and 3.8 nM. Additionally, it inhibits TNF-α with an IC50 of 6.0 nM, indicating its potential for topical Atopic dermatitis (AD) research [1].
Targets(IC50)	Others,PDE
In vitro	LEO 39652 exhibits significant unbound in vitro efficacy, as demonstrated by its capacity to inhibit LPS-induced TNF-α release in human peripheral blood mononuclear cells (PBMC) cultured in serum-free medium. Additionally, LEO 39652 demonstrates relatively high affinity for binding to human serum albumin[2].
In vivo	LEO 39652 is inactivated both in blood and liver (dual-soft) while remaining stable in the skin[1]. Pharmacokinetic analysis reveals that LEO 39652 exhibits total clearance (rats 930, minipigs 200, and monkey 300 mL/min/kg) and ratio to total AUC (rats 4, minipigs 6, and monkey 6%) following intravenous administration (rats 0.075, minipigs 0.5, and monkeys 2.0 mg/kg)[1].

Solubility Information

Solubility	DMSO: 25 mg/mL (59.32 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3728 mL	11.8638 mL	23.7276 mL
5 mM	0.4746 mL	2.3728 mL	4.7455 mL
10 mM	0.2373 mL	1.1864 mL	2.3728 mL
50 mM	0.0475 mL	0.2373 mL	0.4746 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

Jens Larsen, et al. Discovery and Early Clinical Development of Isobutyl 1-[8-Methoxy-5-(1-oxo-3 H-isobenzofuran-5-yl)-[1,2,4]triazolo[1,5- a]pyridin-2-yl]cyclopropanecarboxylate (LEO 39652), a Novel Dual-Soft" PDE4 Inhibitor for Topical Treatment of Atopic Dermatitis. J Med Chem. 2020 Dec 10;63(23):14502-14521.
Stefan Eirefelt