BI-2545

Cat. No.: HY-124772 CAS No.: 2162961-71-7 Molecular Formula: $C_{23}H_{19}F_6N_5O_3$ Molecular Weight: 527.42

Target: Phosphodiesterase (PDE) Pathway: Metabolic Enzyme/Protease Storage: Powder -20°C 3 years

> 4°C 2 years In solvent -80°C 2 years

> > -20°C 1 year

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: 250 mg/mL (474.01 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg	
	1 mM	1.8960 mL	9.4801 mL	18.9602 mL	
	5 mM	0.3792 mL	1.8960 mL	3.7920 mL	
	10 mM	0.1896 mL	0.9480 mL	1.8960 mL	

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.08 mg/mL (3.94 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.08 mg/mL (3.94 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	BI-2545 is a potent autotaxin (ATX) inhibitor that significantly reduces LPA, with IC ₅₀ s of 2.2 nM and 3.4 nM for human ATX and rat ATX, respectively ^[1] .
IC ₅₀ & Target	C50: 2.2 nM (human ATX), 3.4 nM (rat ATX) ^[1]
In Vitro	BI-2545 displays good potency in the LPA and rat whole blood assay with IC_{50} s of 29 nM and 96 nM, respectively ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	BI-2545 (10 mg/kg; p.o.) has high and sustained in vivo efficacy in reducing LPAs ^[1] . BI-2545 (10 mg/kg; p.o.) has a half-life of $t_{1/2}$ =3.4 hours ^[1] .

Animal Model:	Rat ^[1]
Dosage:	10 mg/kg
Administration:	Oral administration

	_	_			_			_	_
\sim	ъ.	ы.	-	w	ь.	N	C	-	۰,

[1]. Kuttruff, C. A., et al. Discovery of BI-2545: A Novel Autotaxin Inhibitor That Significantly Reduces LPA Levels in Vivo. ACS Medicinal Chemistry Letters, 8(12), 1252–1257.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

Tel: 609-228-6898

Fax: 609-228-5909

 $\hbox{E-mail: tech@MedChemExpress.com}$

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