Data Sheet (Cat.No.T37842)

TargetMol

ASB 14780

Chemical Properties

CAS No. :	1069046-00-9
Formula:	C35H38N2O6
Molecular Weight:	582.70
Storage:	Keep away from moisture 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	ASB 14780 is a 4-phenoxy derivative that exhibits highly selective inhibition of cytosolic phospholipase A2α (cPLA2α), with an IC_{50} value as low as 20 nM. By inhibiting the production of pro-inflammatory mediators such as arachidonic acid, ASB 14780 effectively reduces TPA-induced ear edema and ovalbumin-induced asthma responses in vivo.
Targets(IC50)	Others
In vivo	ASB 14780 (50 mg/kg; p.o.; once) suppresses the increase in the ear thickness elicited by the application of TPA (tetradecanoyl phorbol acetate) in mouse.[1] ASB 14780 (5 mg/kg; 20 mg/kg; p.o.; once daily) attenuates AHR (airway hyperreactivity), and inhibits IAR (immediate asthmatic response) and LAR (late asthmatic response) in a dose-dependent manner.[1] ASB 14780 shows well oral activity of 89.6% in mouse calculated from the ratio of oral administration's AUC (10 mg/kg; p.o.) and intravenonous administration's AUC (1 mg/kg; i.v.).[1]

Solubility Information

Solubility	DMSO: 80 mg/mL (137.29 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.7161 mL	8.5807 mL	17.1615 mL
5 mM	0.3432 mL	1.7161 mL	3.4323 mL
10 mM	0.1716 mL	0.8581 mL	1.7161 mL
50 mM	0.0343 mL	0.1716 mL	0.3432 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

Tomoo T, et al. Design, synthesis, and biological evaluation of 3-(1-Aryl-1H-indol-5-yl)propanoic acids as new indole-based cytosolic phospholipase A2α inhibitors. J Med Chem. 2014;57(17):7244-7262.