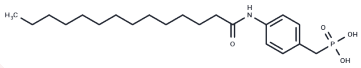
Data Sheet (Cat.No.T38488)

TargetMol

S32826

Chemical Properties



CAS No. : 1096770-84-1

Formula: C21H36NO4P

Molecular Weight: 397.496

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	S32826 is a highly potent inhibitor of autotaxin, exhibiting an IC50 value of 8.8 nM. It displays comparable inhibitory properties towards various autotaxin isoforms, including α, β, and γ. Furthermore, S32826 effectively inhibits the release of LPA from adipocytes.
Targets(IC50)	Others,PDE
In vitro	S32826, at concentrations ranging from 0.001 to 10 μM over a period of 10 days, dose-dependently reduces lyso-phosphatidic acid (LPA) secretion by 3T3-F442A adipocytes, with an IC 50 value of 90 nM and achieving a peak suppression of 80% at 500 nM[1]. Additionally, at a concentration of 1 μM for 24 hours, S32826 effectively blocks the Dexamethasone-induced surge in autotaxin (ATX) mRNA levels and lysophospholipase D (lysoPLD) activity in the conditioned media of HTM cells. It also prevents Dexamethasone-triggered phosphorylation of myosin light chain (MLC) and cofilin, as well as the mRNA overexpression of COL1A1 and COL4A1, alongside inhibiting the expression of α-SMA, fibronectin, and collagen-1 in HTM cells[2].
In vivo	Topical application of S32826 at concentrations ranging from 2 to 10 mM for 2 hours to 5 days leads to a dose- and time-dependent reduction in intraocular pressure (IOP) in rabbits[2]. A single intracameral injection of approximately 2 μM S32826 also decreases IOP in rabbits, maintaining the ocular hypotensive effect for over 48 hours[2]. However, when administered orally (p.o.), intraperitoneally (i.p.), subcutaneously (s.c.), or intravenously (i.v.) at a dose of 10 mg/kg, S32826 demonstrates poor in vivo stability and/or bioavailability[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.5157 mL	12.5786 mL	25.1572 mL
5 mM	0.5031 mL	2.5157 mL	5.0314 mL
10 mM	0.2516 mL	1.2579 mL	2.5157 mL
50 mM	0.0503 mL	0.2516 mL	0.5031 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

Ferry G, et, al. S32826, a nanomolar inhibitor of autotaxin: discovery, synthesis and applications as a pharmacological tool. J Pharmacol Exp Ther. 2008 Dec;327(3):809-19.
Honjo M, et, al. Role of the Autotaxin-LPA Pathway in Dexamethasone-Induced Fibrotic Responses and Extracellular Matrix Production in Human Trabecular Meshwork Cells. Invest Ophthalmol Vis Sci. 2018 Jan 1;59(1): 21-30.
Iyer P, et, al. Autotaxin-lysophosphatidic acid axis is a novel molecular target for lowering intraocular pressure. PLoS One. 2012;7(8):e42627.

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