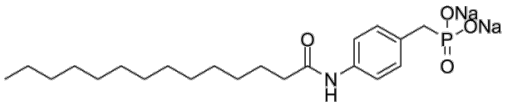
Product Data Sheet

Product Name: S32826 disodium
Cat. No.: GC63997

Chemical Properties

Cas. No.	1103672-43-0		
Formula	C21H34NNa2O4P	M.Wt	441.45
Solubility	Ethanol : 2.4 mg/mL (5.44 mM; Need ultrasonic)|Water : < 0.1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble)	Storage	Store at -20°C, protect from light, stored under nitrogen
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			



Background

S32826 disodium is a potent autotaxin inhibitor, with an IC50 of 8.8 nM. S32826 disodium shows similar inhibitory effects at various autotaxin isoforms (α, β and γ). S32826 disodium inhibits LPA release from adipocytes[1].

S32826 (0.001-10 μM; 10 days) disodium dose-dependently inhibits the release of lyso-phosphatidic

acid (LPA) by 3T3-F442A adipocytes with an IC50 of 90 nM and a maximal inhibition of 80% at 500 nM[1].S32826 (1 μM; 24 h) disodium inhibits Dexamethasone-induced increases in autotaxin (ATX) mRNA expression in HTM cells and lysoPLD activity in conditioned media. S32826 disodium inhibits Dexamethasone-induced the phosphorylation of MLC and cofilin, mRNA upregulation of COL1A1 and COL4A1, and expression of α-SMA, fibronectin and collagen-1 in the HTM cells[2].

Topical application of S32826 (2-10 mM; 2 h-5 d) disodium decreases intraocular pressure (IOP) in a dose- and time-dependent manner in rabbits[2].S32826 (~2 μM; single intracameral injection) disodium reduces the IOP in rabbits, with the ocular hypotensive response lasting for more than 48 hrs[2].S32826 (10 mg/kg; p.o., i.p., s.c., and i.v.) disodium shows poor in vivo stability and/or bioavailability[1].

[1]. 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.
[2]. 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.
[3]. Iyer P, et, al. Autotaxin-lysophosphatidic acid axis is a novel molecular target for lowering intraocular pressure. PLoS One. 2012;7(8):e42627.