

Product Data Sheet

Product Name: S32826 disodium

Cat. No.: GC63997

Chemical Properties

Cas. No. 1103672-43-0

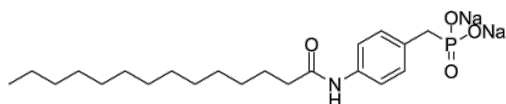
Formula C₂₁H₃₄NNa₂O₄P M.Wt 441.45

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 μ M; 10 days) disodium dose-dependently inhibits the release of lyso-phosphatidic

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

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acid (LPA) by 3T3-F442A adipocytes with an IC₅₀ of 90 nM and a maximal inhibition of 80% at 500 nM[1]. S32826 (1 μ M; 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 ($\sim$ 2 μ M; 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.

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