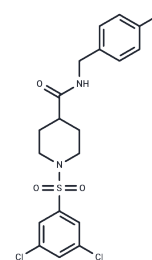


SLC13A5-IN-1

Chemical Properties

CAS No. : 2227548-95-8
Formula: C₁₉H₁₉Cl₃N₂O₃S
Molecular Weight: 461.79
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	SLC13A5-IN-1 is a selective inhibitor of the sodium-citrate co-transporter (SLC13A5) that completely blocks the uptake of ¹⁴ C-citrate, with an IC ₅₀ of 0.022 μM in HepG2 cells.
Targets(IC ₅₀)	Sodium Channel, Stearoyl-CoA Desaturase (SCD)
In vitro	In HepG2/ ¹⁴ C-Citrate Uptake Assay, SLC13A5-IN-1 exhibits an IC ₅₀ of 0.022 μM. HepG2 cells endogenously express hSLC13A5 transporter which is responsible for the uptake of citrate into these cells. Uptake of ¹⁴ C-citrate can be completely blocked by SLC13A5-IN-1 and the signal can be competed with unlabelled citrate. In recombinant hSLC13A5/ ¹⁴ C-Citrate Uptake Assay, SLC13A5-IN-1 exhibits an IC ₅₀ of 0.056 μM. SLC13A5-IN-1 exhibits an IC ₅₀ of 100 μM in recombinant Human GlyT2/3H-Glycine Uptake Assay. The human embryonic kidney 293 cells are used that stably over-express the human GlyT2 receptor which is responsible for the uptake of glycine into these cells. Uptake of 3H-glycine can be completely blocked by SLC13A5-IN-1.

Solubility Information

Solubility	DMSO: 5 mg/mL (10.83 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1655 mL	10.8274 mL	21.6549 mL
5 mM	0.4331 mL	2.1655 mL	4.331 mL
10 mM	0.2165 mL	1.0827 mL	2.1655 mL
50 mM	0.0433 mL	0.2165 mL	0.4331 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

Joerg Kley, et al. Sulfonamides as inhibitors of the uptake of extracellular citrate. Patent WO2018104220A1

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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