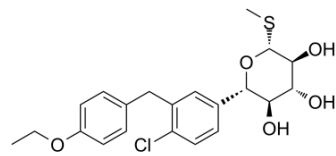


Sotagliflozin

Cat. No.:	HY-15516		
CAS No.:	1018899-04-1		
Molecular Formula:	C ₂₁ H ₂₅ ClO ₅ S		
Molecular Weight:	424.94		
Target:	SGLT		
Pathway:	Membrane Transporter/Ion Channel		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : ≥ 100 mg/mL (235.33 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.3533 mL	11.7664 mL	23.5327 mL
	5 mM	0.4707 mL	2.3533 mL	4.7065 mL
	10 mM	0.2353 mL	1.1766 mL	2.3533 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (5.88 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (5.88 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Sotagliflozin (LX-4211) is a potent dual SGLT2/1 inhibitor. Antidiabetic agents.

IC₅₀ & Target

SGLT1/2

In Vitro

LX4211 enhanced urinary glucose excretion by inhibiting SGLT2-mediated renal glucose reabsorption; markedly and significantly improved multiple measures of glycemic control, including fasting plasma glucose, oral glucose tolerance, and HbA(1c); and significantly lowered serum triglycerides. LX4211 also mediated trends for lower weight, lower blood pressure, and higher glucagon-like peptide-1 levels. In a follow-up single-dose study in 12 patients with T2DM, LX4211 (300 mg) significantly increased glucagon-like peptide-1 and peptide YY levels relative to pretreatment values, probably by delaying

SGLT1-mediated intestinal glucose absorption [1]. LX4211-treated mice and SGLT1^{-/-} mice also had increased GLP-1 AUC values, decreased glucose-dependent insulinotropic polypeptide (GIP) AUC values, and decreased blood glucose excursions during the 6 hours after a challenge with oral glucose alone [2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

CUSTOMER VALIDATION

- Oncogene. 2021 Jun 21.
- Mol Metab. 2019 Jan;19:1-12.
- Biochem Pharmacol. 2016 Feb 1;101:27-39.
- J Nutr. 2020 Jul 1;150(7):1790-1798.
- J Ethnopharmacol. 2021 Feb 10;266:113398.

See more customer validations on www.MedChemExpress.com

REFERENCES

[1]. Zambrowicz B, et al. LX4211, a dual SGLT1/SGLT2 inhibitor, improved glycemic control in patients with type 2 diabetes in a randomized, placebo-controlled trial. Clin Pharmacol Ther. 2012 Aug;92(2):158-69.

[2]. Powell DR, et al. LX4211 increases serum glucagon-like peptide 1 and peptide YY levels by reducing sodium/glucose cotransporter 1 (SGLT1)-mediated absorption of intestinal glucose. J Pharmacol Exp Ther. 2013 May;345(2):250-9.

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

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