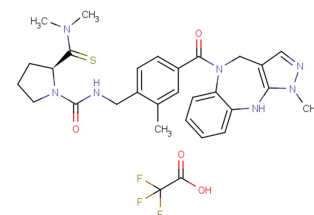


LIT-001

Chemical Properties

CAS No.:	2245072-21-1
Formula:	C30H34F3N7O4S
Molecular Weight:	645.7
Appearance:	N/A
Storage:	0-4°C for short term (days to weeks), or -20°C for long term (months).



Biological Description

Description	LIT-001 improves social interaction in a mouse model of autism. It is the first nonpeptide oxytocin receptor agonist with EC50 of 55 nM and Ki of 226 nM.
Targets(IC50)	OT-R: (ki)226 nM
In vitro	In the in vitro signal transduction experiment, LITL-001 is an unbiased OT-R agonist, acting on the two main signal transduction pathways of this receptor, with slight antagonistic effect on V1a and agonist effect on V1b receptor, only observed at high concentration.
In vivo	LIT-001 (10-20 mg/kg; i.p.) alleviates core symptoms in the context of autism spectrum disorders (ASD) [1].

Solubility Information

Solubility	DMSO: 247 mg/mL (382.53mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.549 mL	7.744 mL	15.487 mL
5 mM	0.31 mL	1.549 mL	3.097 mL
10 mM	0.155 mL	0.774 mL	1.549 mL
50 mM	0.031 mL	0.155 mL	0.31 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

1. Frantz MC, et al. LIT-001, the First Nonpeptide Oxytocin Receptor Agonist that Improves Social Interaction in a Mouse Model of Autism. *J Med Chem.* 2018 Oct 11;61(19):8670-8692.

Inhibitors · Natural Compounds · Compound Libraries

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use.

Tel:781-999-4286

E-mail:info@targetmol.com

Address:36 Washington Street,Wellesley Hills,MA 02481