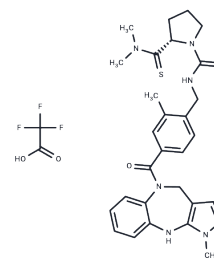


LIT-001

Chemical Properties

CAS No. : 2245072-21-1
 Formula: C30H34F3N7O4S
 Molecular Weight: 645.7
 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	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)	Oxytocin Receptor
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 of autism spectrum disorders (ASD) [1].

Solubility Information

Solubility	DMSO: 247 mg/mL (382.53 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 5 mg/mL (7.74 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.5487 mL	7.7435 mL	15.4871 mL
5 mM	0.3097 mL	1.5487 mL	3.0974 mL
10 mM	0.1549 mL	0.7744 mL	1.5487 mL
50 mM	0.031 mL	0.1549 mL	0.3097 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

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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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:34 Washington Street,Wellesley Hills,MA 02481