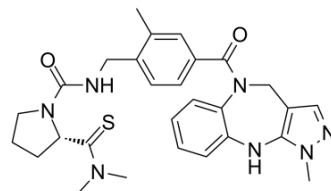


LIT-001 free base

Cat. No.:	HY-124733
CAS No.:	2245072-20-0
Molecular Formula:	C ₂₈ H ₃₃ N ₇ O ₂ S
Molecular Weight:	531.67
Target:	Oxytocin Receptor
Pathway:	GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	LIT-001 free base is the first nonpeptide oxytocin receptor (OT-R) agonist (EC ₅₀ =55 nM; K _i =226 nM). LIT-001 free base improves social interaction in a mouse model of autism ^[1] .
In Vitro	In vitro signaling experiments, LIT-001 free base is a nonbiased OT-R agonist on the two main signaling pathways of this receptor, with minor antagonist effect on V1a and agonist effect on V1b receptors, observed at high concentrations only ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	LIT-001 free base (10-20 mg/kg; i.p.) alleviates core symptoms in the context of autism spectrum disorders (ASD) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
Animal Model:	Oprm1 ^{-/-} mice (bred in house on a 50% 129SVPas–50% C57BL/6J hybrid background) ^[1]
Dosage:	10, 20 mg/kg
Administration:	i.p.
Result:	Alleviated core symptoms in the context of ASD.

REFERENCES

[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.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA