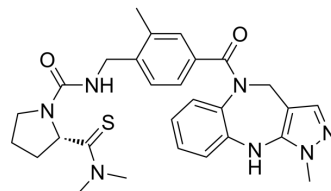


## LIT-001 free base

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



### BIOLOGICAL ACTIVITY

<b>Description</b>	LIT-001 free base is the first nonpeptide oxytocin receptor (OT-R) agonist (EC <sub>50</sub> =55 nM; K <sub>i</sub> =226 nM). LIT-001 free base improves social interaction in a mouse model of autism <sup>[1]</sup> .
<b>In Vitro</b>	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 <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	LIT-001 free base (10-20 mg/kg; i.p.) alleviates core symptoms in the context of autism spectrum disorders (ASD) <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>Animal Model:</b>	Oprm1 <sup>-/-</sup> mice (bred in house on a 50% 129SVPas–50% C57BL/6J hybrid background) <sup>[1]</sup>
<b>Dosage:</b>	10, 20 mg/kg
<b>Administration:</b>	i.p.
<b>Result:</b>	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.**

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