

<b>Product Name</b>	: LIT-001
<b>Synonyms</b>	: —
<b>Cat No.</b>	: M22581
<b>CAS Number</b>	: 2245072-21-1
<b>Molecular Formula</b>	: C <sub>30</sub> H <sub>34</sub> F <sub>3</sub> N <sub>7</sub> O <sub>4</sub> S
<b>Formula Weight</b>	: 645.7
<b>Chemical Name</b>	: —
<b>Description</b>	LIT-001 improves social interaction in a mouse model of autism. It is the first nonpeptide oxytocin receptor agonist with EC <sub>50</sub> of 55 nM and K <sub>i</sub> of 226 nM. 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. LIT-001 (10-20 mg/kg; i.p.) alleviates core symptoms in the context of autism spectrum disorders (ASD).
<b>Pathway</b>	: Others
<b>Target</b>	: Other Targets
<b>Receptor</b>	: oxytocin receptor
<b>Solubility</b>	: DMSO: 247 mg/mL (382.53mM; Need ultrasonic)
<b>SMILES</b>	: <chem>OC(=O)C(F)(F)F.CN(C)C(=S)C@H1CCCCN1C(=O)NCc1ccc(cc1C)C(=O)N1Cc2cnn(C)c2Nc2ccccc12</chem>
<b>Storage</b>	: (-20°C)
<b>Stability</b>	: ≥ 2 years
<b>Reference</b>	:

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.