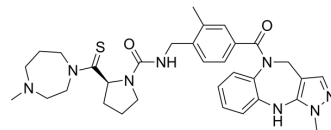


## TC OT 39

<b>Cat. No.:</b>	HY-108678
<b>CAS No.:</b>	479232-57-0
<b>Molecular Formula:</b>	C <sub>32</sub> H <sub>40</sub> N <sub>8</sub> O <sub>2</sub> S
<b>Molecular Weight:</b>	600.78
<b>Target:</b>	Oxytocin Receptor; Vasopressin 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>	TC OT 39 is a synthetic oxytocin analog, as well as a selective agonist of oxytocin receptor (OXTR, EC <sub>50</sub> =180 nM). TC OT 39 is also an Avpr1a vasopressin receptor antagonist with an K <sub>i</sub> value of 330 nM. TC OT 39 exhibits sedative effects in mouse models <sup>[1]</sup> .	
<b>IC<sub>50</sub> &amp; Target</b>	Avpr1a vasopressin receptor 300 nM (K <sub>i</sub> )	Oxytocin Receptor 180 nM (EC <sub>50</sub> )
<b>In Vivo</b>	TC OT 39 (50 mg/kg, 75 mg/kg; i.p.; 4 times during 8-9 days) significantly decreases the marble burying at dose of 50 mg/kg, and shows overt sedative-like effects at dose of 75 mg/kg in C57BL/6J mice <sup>[1]</sup> . Marble burying is based on the natural instinct of rodents to bury objects, commonly used in preclinical research to assess anxiety-like behavior in rodents <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

### REFERENCES

[1]. Moy SS, et al. Prosocial effects of an oxytocin metabolite, but not synthetic oxytocin receptor agonists, in a mouse model of autism. *Neuropharmacology*. 2019 Jan;144:301-311.

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

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