

Screening Libraries

Proteins

Product Data Sheet

Pro8-Oxytocin

Cat. No.: HY-P4990 CAS No.: 24327-19-3 Molecular Formula: $C_{42}H_{62}N_{12}O_{12}S_{2}$

Molecular Weight: 991.14

Cys-Tyr-Ile-Gln-Asn-Cys-Pro-Pro-Gly-NH2 (Disulfide bridge: Cys1-Cys6) Sequence:

Sequence Shortening: CYIQNCPPG-NH2 (Disulfide bridge: Cys1-Cys6)

Target: Oxytocin Receptor Pathway: GPCR/G Protein

Please store the product under the recommended conditions in the Certificate of Storage:

Analysis.

BIOLOGICAL ACTIVITY

Description	Pro8-Oxytocin is a a modified oxytocin (OXT) ligand. Pro8-Oxytocin produces more potent and efficacious responses at primate OXTR and stronger behavioral effects than the consensus mammalian OXT ligand (Leu8-Oxytocin). Pro8-Oxytocin produce a less efficacious response than Vasopressin (HY-B1811) (AVP) at human AVPR1a and higher efficacious response than AVP at marmoset AVPR1a ^[1] .
In Vitro	Pro8-Oxytocin (1 nM-10 μ M) is able to activate Ca ²⁺ mobilization in AVPR1a in CHO cells ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Pro8-Oxytocin binds with higher affinity at primate OXTR (in both Pro8-OXT and Leu8-OXT expressing primates) and produces greater calcium signaling responses compared with Leu8-OXT ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Mustoe A, et al. Leu8 and Pro8 oxytocin agonism differs across human, macaque, and marmoset vasopressin 1a receptors. Sci Rep. 2019 Oct 29;9(1):15480.

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

Page 1 of 1