# Oxyntomodulin

**Cat. No.:** HY-P1144

**CAS No.:** 62340-29-8

**Molecular Formula:** $C_{192}H_{295}N_{59}O_{60}S$

**Molecular Weight:** 4421.86

HSQGTFTSDYSKYLDSRRAQDFVQWLMNTKRNKNNIA

**Sequence:** His-Ser-Gln-Gly-Thr-Phe-Thr-Ser-Asp-Tyr-Ser-Lys-Tyr-Leu-Asp-Ser-Arg-Arg-Ala-Gln-Asp-Phe-Val-Gln-Trp-Leu-Met-Asn-Thr-Lys-Arg-Asn-Lys-Asn-Asn-Ile-Ala

**Sequence Shortening:** HSQGTFTSDYSKYLDSRRAQDFVQWLMNTKRNKNNIA

**Target:** GCGR

**Pathway:** GPCR/G Protein

**Storage:** Sealed storage, away from moisture

Powder -80°C 2 years

-20°C 1 year

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

## SOLVENT & SOLUBILITY

**In Vitro**

DMSO : 100 mg/mL (22.61 mM; Need ultrasonic)

| Preparing Stock Solutions | Solvent / Mass / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|---|
| | 1 mM | 0.2261 mL | 1.1307 mL | 2.2615 mL |
| | 5 mM | 0.0452 mL | 0.2261 mL | 0.4523 mL |
| | 10 mM | 0.0226 mL | 0.1131 mL | 0.2261 mL |

Please refer to the solubility information to select the appropriate solvent.

**In Vivo**

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (0.57 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (0.57 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (0.57 mM); Clear solution

## BIOLOGICAL ACTIVITY

**Description**

Oxyntomodulin, a 37-amino acid peptide hormone, is a glucagon-like peptide 1 (GLP-1) receptor agonist[1].

**In Vitro**

Oxyntomodulin is a peptide hormone released from the gut in post-prandial state that activates both the glucagon-like peptide-1 receptor (GLP1R) and the glucagon receptor (GCGR) resulting in superior body weight lowering to selective GLP1R

agonists. Oxyntomodulin is mainly produced in gut endocrine L-cells by processing of the preproglucagon precursor by prohormone convertase 1/3. Oxyntomodulin is a full agonist in cell lines over expressing the human GLP1R and GCGR-mediated cAMP accumulation although with reduced affinity compared to GLP-1 and glucagon[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## REFERENCES

[1]. Alessandro Pocai. Action and therapeutic potential of oxyntomodulin. Mol Metab. 2013 Dec 14;3(3):241-51.



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