

## Product datasheet for SC300150

## OriGene Technologies, Inc.

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## Oxytocin neurophysin 1 (OXT) (NM 000915) Human Untagged Clone

## **Product data:**

**Product Type: Expression Plasmids** 

**Product Name:** Oxytocin neurophysin 1 (OXT) (NM\_000915) Human Untagged Clone

Tag: Tag Free

Oxytocin neurophysin 1 Symbol: OT; OT-NPI; OXT-NPI

**Mammalian Cell** None

Selection:

Synonyms:

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene ORF sequence for NM\_000915 edited

> ATGGCCGGCCCAGCCTCGCTTGCTGTCTGCTCGGCCTCCTGGCGCTGACCTCCGCCTGC TGCCTCCCTGCGGCCCCGGGGGCAAAGGCCGCTGCTTCGGGCCCAATATCTGCTGCGCG GAAGAGCTGGGCTGCTTCGTGGGCACCGCCGAAGCGCTGCCGCCAGGAGGAGAACTAC CTGCCGTCGCCCTGCCAGTCCGGCCAGAAGGCGTGCGGGAGCGGGGGCCGCTGCGCGGTC

ACCTTCTCCCAGCGCTGA

**Restriction Sites:** Please inquire ACCN: NM 000915

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

> point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** The open reading frame of this TrueClone was fully sequenced and found to be a perfect

match to the protein associated to this reference.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).





**Reconstitution Method:** 

- 1. Centrifuge at 5,000xg for 5min.
- 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
- 3. Close the tube and incubate for 10 minutes at room temperature.
- 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
- 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** NM 000915.2, NP 000906.1

 RefSeq Size:
 512 bp

 RefSeq ORF:
 378 bp

 Locus ID:
 5020

 UniProt ID:
 P01178

 Cytogenetics:
 20p13

**Protein Families:** Secreted Protein

**Gene Summary:** This gene encodes a precursor protein that is processed to produce oxytocin and

neurophysin I. Oxytocin is a posterior pituitary hormone which is synthesized as an inactive precursor in the hypothalamus along with its carrier protein neurophysin I. Together with neurophysin, it is packaged into neurosecretory vesicles and transported axonally to the nerve endings in the neurohypophysis, where it is either stored or secreted into the bloodstream. The precursor seems to be activated while it is being transported along the axon to the posterior pituitary. This hormone contracts smooth muscle during parturition and lactation. It is also involved in cognition, tolerance, adaptation and complex sexual and maternal behaviour, as well as in the regulation of water excretion and cardiovascular