

## Product datasheet for **RG224226**

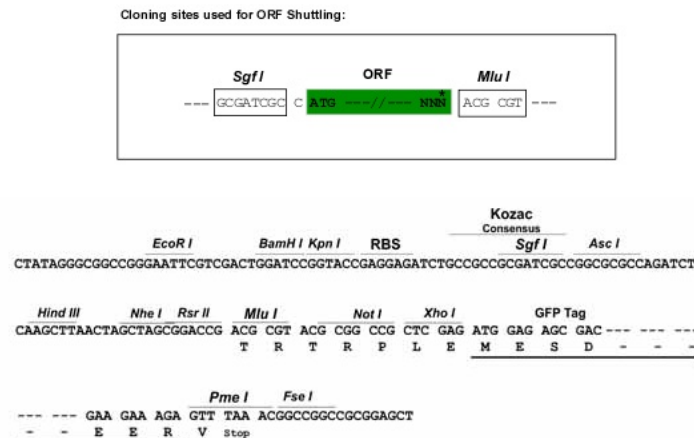
### Oxytocin neurophysin 1 (OXT) (NM\_000915) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Oxytocin neurophysin 1 (OXT) (NM_000915) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Oxytocin neurophysin 1
Synonyms:	OT; OT-NPI; OXT-NPI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	<p>&gt;RG224226 representing NM_000915            Red=Cloning site Blue=ORF Green=Tags(s)</p> <p>TTTGTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC            GCC<b>CGATCGCC</b></p> <p>ATGGCCGGCCCCAGCCTCGCTTGCTGTCTGCTCGGCCTCCTGGCGCTGACCTCCGCCTGCTACATCCAGA            ACTGCCCCCTGGGAGGCAAGAGGGCCGCGCGGACCTCGACGTGCGCAAGTGCCTCCCCTGCGGCCCGG            GGGCAAAGGCCGCTGCTTCGGGCCAATATCTGCTGCGCGGAAGAGCTGGGCTGCTTCGTGGGCACCGCC            GAAGCGCTGCGCTGCCAGGAGGAGAACTACCTGCCGTGCGCCTGCCAGTCCGGCCAGAAGGCGTGCGGGA            GCGGGGGCCGCTGCGCGGTCTTGGGCCTCTGCTGCAGCCCGACGGCTGCCACGCCGACCTGCCTGCGA            CGCGGAAGCCACCTTCTCCAGCGC</p> <p>ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA</p>
Protein Sequence:	<p>&gt;RG224226 representing NM_000915            Red=Cloning site Green=Tags(s)</p> <p>MAGPSLACLLGLLALTSACYIQNCPLGGKRAAPDLVVRKCLPCGPGGKGRFCFNPICCAEELGCFVGTA            EALRCQEENYLPSPCQSGQKACGSGGRCAVLGLCCSPDGCHADPACDAEATFSQR</p> <p>TRTRPLE - GFP Tag - V</p>
Restriction Sites:	Sgfl-MluI


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## Cloning Scheme:



ACCN: NM\_000915

ORF Size: 375 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.

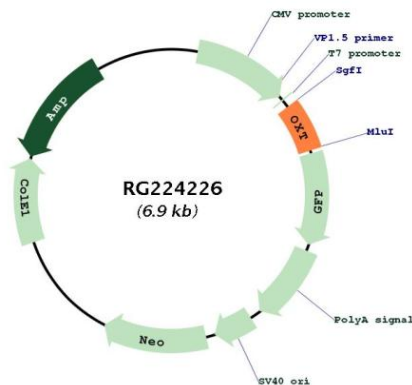
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM\\_000915.4](#)

RefSeq Size: 512 bp

RefSeq ORF:	378 bp
Locus ID:	5020
UniProt ID:	<a href="#">P01178</a>
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 functions. [provided by RefSeq, Dec 2013]

## Product images:



Circular map for RG224226