

Product datasheet for MR225611

Oxt (NM_011025) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Oxt (NM_011025) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Oxt
Synonyms: OT; Ox; Oxy
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR225611 representing NM_011025
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCCTGCCAGTCTCGCTTGCCTGCTGGCTTACTGGCTCTGACCTCGGCCTGCTACATCCAGA
 ACTGCCCCCTGGCGGCAAGAGGGCTGTGCTGGACCTGGATATGCGCAAGTGTCTCCCCTGCGGCCCGGG
 CGGCAAAGGACGCTGCTCGGACCAAGCATCTGCTGCGCGGACGAGCTGGGCTGCTTCGTGGCACCGCC
 GAGGCGCTGCGTCCAGGAGGAGAACTACCTGCCTTCGCCCTGCCAGTCTGGCCAGAAGCCCTGCGGGA
 GCGGAGGCGCTGCGCCGCCACAGGCATCTGCTGCAGCCCGATGGCTGCCGCACGGACCCCGCCTGCGA
 CCCTGAGTCTGCCTTCTCGGAGCCG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR225611 representing NM_011025
 Red=Cloning site Green=Tags(s)

MACPSLACLLGLLALTSACYIQNCPLGGKRAVLDLDMRKCLPCGPGGKGRFCGSPISCCADELGCVFVGT
 EALRCQEENYLPSPCQSQKPCGSGGRCAATGICCCSPDGCRTDPACDPESAFSER

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9007_h08.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_011025

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.

RefSeq: [NM_011025.1](#), [NM_011025.2](#), [NM_011025.3](#), [NM_011025.4](#), [NP_035155.1](#)

RefSeq Size: 471 bp

RefSeq ORF: 378 bp

Locus ID: 18429

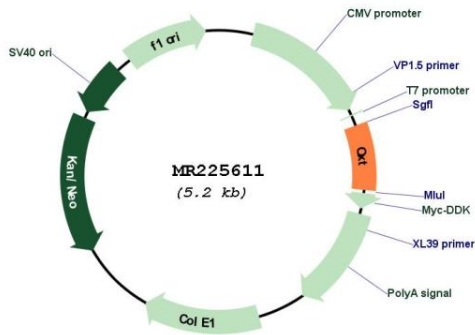
UniProt ID: [P35454](#)

Cytogenetics: 2 63.24 cM

MW: 13.3 kDa

Gene Summary: This gene encodes a preproprotein that is processed to produce oxytocin and neurophysin 1. Oxytocin is a posterior pituitary hormone which is synthesized as an inactive precursor in the hypothalamus along with its carrier protein neurophysin 1. 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, the stress response and complex sexual and maternal behavior, as well as in the regulation of water excretion, salt appetite, blood pressure and cardiovascular functions. Deletion of this gene in mouse reduces bone formation resulting in osteoporosis. [provided by RefSeq, Dec 2013]

Product images:



Circular map for MR225611