

Product datasheet for TP525611

OriGene Technologies, Inc.

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Oxt (NM 011025) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse oxytocin (Oxt), with C-terminal MYC/DDK tag,

expressed in HEK293T cells, 20ug

Species: Mouse

Expression Host: HEK293T

Expression cDNA Clone >MR225611 representing NM_011025

or AA Sequence: Red=Cloning site Green=Tags(s)

MACPSLACCLLGLLALTSACYIQNCPLGGKRAVLDLDMRKCLPCGPGGKGRCFGPSICCADELGCFVGTA

EALRCQEENYLPSPCQSGQKPCGSGGRCAATGICCSPDGCRTDPACDPESAFSER

TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-MYC/DDK

Predicted MW: 13.3 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 035155

Locus ID: 18429

UniProt ID: <u>P35454</u>, <u>Q545V4</u>

RefSeq Size: 471

Cytogenetics: 2 63.24 cM

RefSeq ORF: 375





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Synonyms:

OT; Ox; Oxy

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]