

## Product datasheet for PH324226

### Oxytocin neurophysin 1 (OXT) (NM\_000915) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	OXT MS Standard C13 and N15-labeled recombinant protein (NP_000906)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC224226
Predicted MW:	12.72 kDa
Protein Sequence:	>RC224226 representing NM_000915 <b>Red</b> =Cloning site <b>Green</b> =Tags(s)  MAGPSLACLLGLLALTSACYIQNCPLGGKRAAPDLVVRKCLPCGPGGKGRFCGPNICCAEELGCFVGTAEALRCQEENYLPSPCQSGQKACGSGGRCAVLGLCCSPDGCHADPACDAEATFSQR  <b>TRTRPLEQKLISEEDLAANDILDYKDDDDKV</b>
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<a href="#">NP_000906</a>
RefSeq Size:	512
RefSeq ORF:	375
Synonyms:	OT; OT-NPI; OXT-NPI
Locus ID:	5020
UniProt ID:	<a href="#">P01178</a> , <a href="#">X5D7M6</a>
Cytogenetics:	20p13



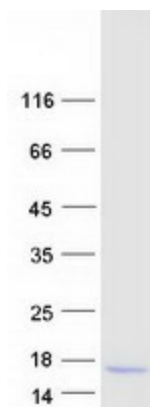
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**Summary:**

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]

**Protein Families:**

Secreted Protein

**Product images:**

Coomassie blue staining of purified OXT protein (Cat# [TP324226]). The protein was produced from HEK293T cells transfected with OXT cDNA clone (Cat# [RC224226]) using MegaTran 2.0 (Cat# [TT210002]).