

## Product datasheet for **AP20599PU-N**

### Oxytocin neurophysin 1 (OXT) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500-1/1000. <b>Immunofluorescence:</b> 1/50-1/200. <b>Immunohistochemistry on Paraffin Sections:</b> 1/50-1/200.
Reactivity:	Human, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of Neurophysin I protein. (region surrounding Lys40)
Formulation:	Phosphate buffered saline (PBS), pH~7.2 State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE). Preservative: 0.05% Sodium Azide
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~20 kDa
Gene Name:	oxytocin/neurophysin I prepropeptide
Database Link:	<a href="#">Entrez Gene 5020 Human P01178</a>



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**Background:**

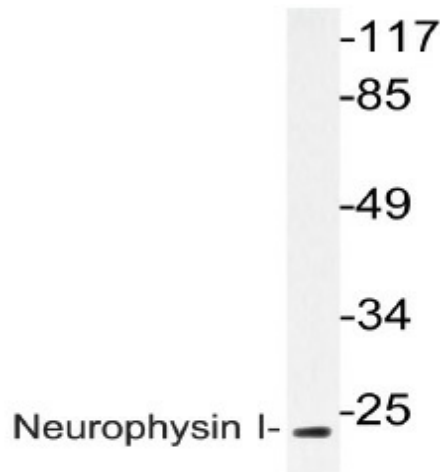
The nonapeptide hormones Arginine Vasopressin (ARGVasopressin or AVP) and Oxytocin are synthesized in the supraoptic and paraventricular nuclei of the hypothalamus together with their respective "carrier" proteins, the neurophysins. Vasopressin and Oxytocin are produced by separate populations of magnocellular neurons in both nuclei. Neurophysin I (NPI) and Neurophysin II (NPII) function as carrier proteins for Oxytocin and Vasopressin, respectively. Oxytocin is a pituitary hormone which induces uterine contractions during childbirth and the ejection of milk from the mammary glands during nursing. Vasopressin is involved in the metabolism of water and electrolytes and has been identified as a vasoconstrictor. Both Neurophysin genes exist as three exons, with each exon encoding a functional protein domain. Studies show that the identically conserved middle region (exon B) is involved in NP-NP homodimer formation as well as being the site for the Glycine 17 to Valine point mutation responsible for familial diabetes insipidus. The genes encoding Neurophysin I and II map to human chromosome 20p13.

**Synonyms:**

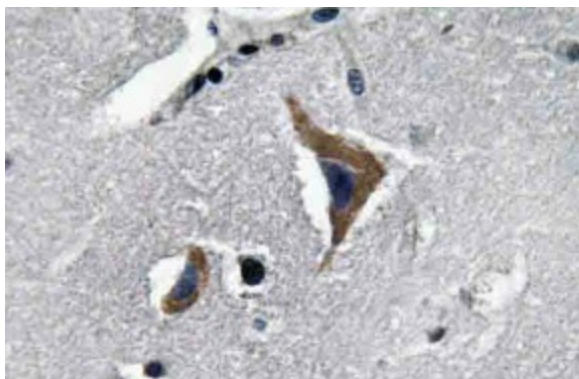
OXT, OT, OT-NPI, Neurophysin 1

**Protein Families:**

Secreted Protein

**Product images:**


Western blot analysis of Neurophysin I Antibody (Cat.-No AP20599PU-N) in extracts from K562 cells.



Immunohistochemistry analysis of Neurophysin I Antibody (Cat.-No AP20599PU-N) in paraffin-embedded Human brain tissue.