

Product datasheet

# Human Oxytocin-neurophysin 1 Prepropeptide ELISA Kit ab242248

Recombinant SimpleStep ELISA

[4 Images](#)

Overview

**Product name** Human Oxytocin-neurophysin 1 Prepropeptide ELISA Kit

**Detection method** Colorimetric

**Precision** Intra-assay

Sample	n	Mean	SD	CV%
serum	8			3.2%

**Sample type** Serum, Hep Plasma, EDTA Plasma, Cit plasma

**Assay type** Sandwich (quantitative)

**Sensitivity** 10 pg/ml

**Range** 125 pg/ml - 8000 pg/ml

**Recovery** Sample specific recovery

Sample type	Average %	Range
Serum	90	84% - 100%
Hep Plasma	104	94% - 113%
EDTA Plasma	104	95% - 111%
Cit plasma	92	83% - 99%

**Assay time** 1h 30m

**Assay duration** One step assay

**Species reactivity** **Reacts with:** Human

**Product overview** Human Oxytocin-neurophysin 1 ELISA Kit (ab242248) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Oxytocin-neurophysin 1 protein in cit plasma, edta plasma, hep plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Oxytocin-neurophysin 1 with 10 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

**Platform** Pre-coated microplate (12 x 8 well strips)

## Properties

**Storage instructions** Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human Oxytocin-neurophysin 1 Prepropeptide Capture Antibody	1 x 600µl
10X Human Oxytocin-neurophysin 1 Prepropeptide Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Human Oxytocin-neurophysin 1 Prepropeptide Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

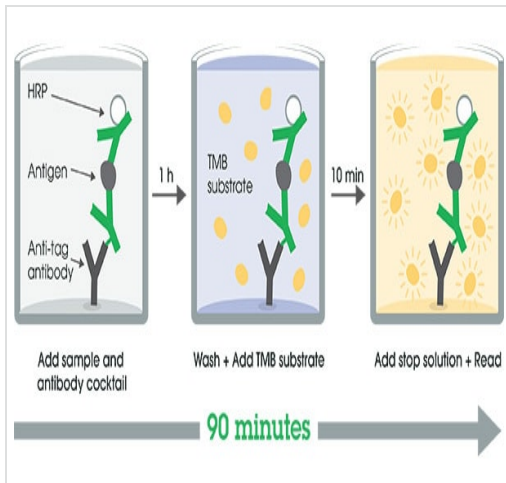
**Relevance** Neurophysin 1 specifically binds oxytocin. Oxytocin causes contraction of the smooth muscle of the uterus and of the mammary gland. Oxytocin is a posterior pituitary hormone which is synthesized as an inactive precursor in the hypothalamus along with its carrier protein neurophysin I. Together 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. Oxytocin 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.

**Cellular localization**

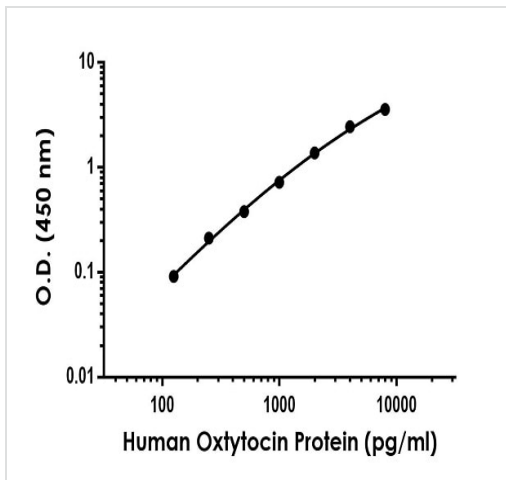
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**Images**



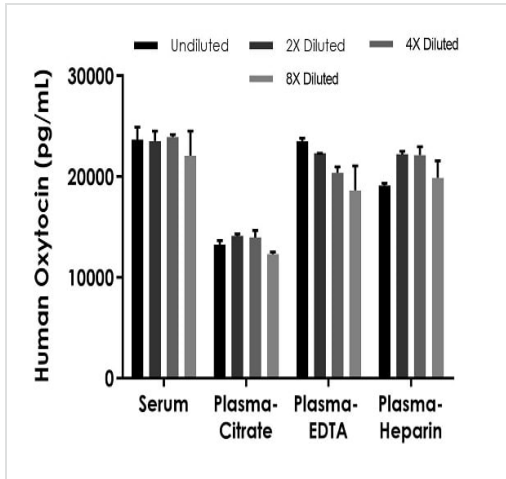
SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

Other - Human Oxytocin-neurophysin 1 ELISA Kit (ab242248)



Example of human Oxytocin-neurophysin 1 standard curve in Sample Diluent NS.

The Oxytocin-neurophysin 1 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.




Interpolated concentrations of native Oxytocin-neurophysin 1 in human serum and plasma samples.

The concentrations of Oxytocin-neurophysin 1 were measured in duplicates, interpolated from the Oxytocin-neurophysin 1 standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 25%, plasma (citrate) 50%, plasma (EDTA) 25%, and plasma (heparin) 50%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Oxytocin-neurophysin 1 concentration was determined to be 23,301 pg/mL in serum, 13,420 pg/mL in plasma (citrate), 21,214 pg/mL in plasma (EDTA), and 20843 pg/mL in plasma (Heparin).

Powered by recombinant antibodies



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Sandwich ELISA - Human Oxytocin-neurophysin 1  
Prepropeptide ELISA Kit (ab242248)

To learn more about the advantages of recombinant antibodies see [here](#).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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