

Oxytocin ELISA Kit ab133050

★★★★☆ 4 Abreviews 9 References 1 Image

Overview

Product name Oxytocin ELISA Kit

Detection method Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
Low	20	39.9pg/ml		12.6%
Medium	20	121.4pg/ml		10.2%
High	20	363.7pg/ml		13.3%

Inter-assay

Sample	n	Mean	SD	CV%
Low	17	47pg/ml		20.9%
Medium	17	145.1pg/ml		16.5%
High	17	397.2pg/ml		11.8%

Sample type Cell culture supernatant, Saliva, Milk, Urine, Serum, Plasma, Tissue Culture Media, Cerebral Spinal Fluid

Assay type Competitive

Sensitivity 15 pg/ml

Range 15.6 pg/ml - 1000 pg/ml

Recovery Sample specific recovery

Sample type	Average %	Range
Saliva	90	% - %
Urine	111	% - %

Sample type	Average %	Range
Serum	104	% - %

Assay time

25h 00m

Assay duration

Multiple steps standard assay

Species reactivity

Reacts with: Human

Predicted to work with: a wide range of other species 

Product overview

Abcam's Oxytocin *in vitro* competitive ELISA (Enzyme-Linked Immunosorbent Assay) kit is designed for the accurate quantitative measurement of Oxytocin in Tissue Culture media, Human Serum, Saliva, Cerebrospinal Fluid and Urine.

A goat anti-rabbit IgG antibody has been precoated onto 96-well plates. Standards or test samples are added to the wells, along with an alkaline phosphatase (AP) conjugated-Oxytocin antigen and a polyclonal rabbit antibody specific to Oxytocin. After incubation the excess reagents are washed away. pNpp substrate is added and after a short incubation the enzyme reaction is stopped and the yellow color generated is read at 405 nm. The intensity of the yellow coloration is inversely proportional to the amount of Oxytocin captured in the plate.

Notes

Oxytocin is a neurohypophysial peptide which is produced in the paraventricular nuclei of the hypothalamus and stored in the posterior pituitary. The molecule consists of nine amino acids linked with a [1-6] disulfide bond and a semi-flexible carboxyamidated tail. A hormone once thought to be limited to female smooth muscle reproductive physiology, more current findings have determined that oxytocin also functions as a neurotransmitter, may be involved in neuropsychiatric disorders, social/sexual behavior and is important in male reproductive physiology. Oxytocin and the related neurohypophysial peptide, Arg-Vasopressin, maintain renal water and sodium balance.

Highly conserved across species boundaries, oxytocin-like neurohypophysial peptides are substituted primarily at residues 4 and/or 8. In the Oxytocin-like peptide, mesotocin, a common peptide found in some fishes, reptiles, amphibians, marsupials and nonmammalian tetrapods, the leucine at residue 8 is substituted for isoleucine. Acting in classical endocrine fashion, Oxytocin elicits regulatory effects by binding specific cell surface receptors which in turn initiate a secondary intracellular response cascade via a phosphoinositide signaling pathway.

Cross Reactivity

Compound	% Cross Reactivity
Mesotocin	7.0
Oxytocin	100
Arg ⁸ -Vasotocin	7.5
Ser ⁴ ,Ile ⁸ -Oxytocin	<0.2
TRH	<0.2
Somatostatin	<0.2

Met-Enkephalin	<0.2
VIP	<0.2
Lys ⁸ - Vasopressin	<0.2
Arg ⁸ - Vasopressin	<0.2
α-ANP	<0.2
Growth Hormone	<0.2
Tocinoic acid	<0.2
Melanostatin	<0.2

Platform Microplate

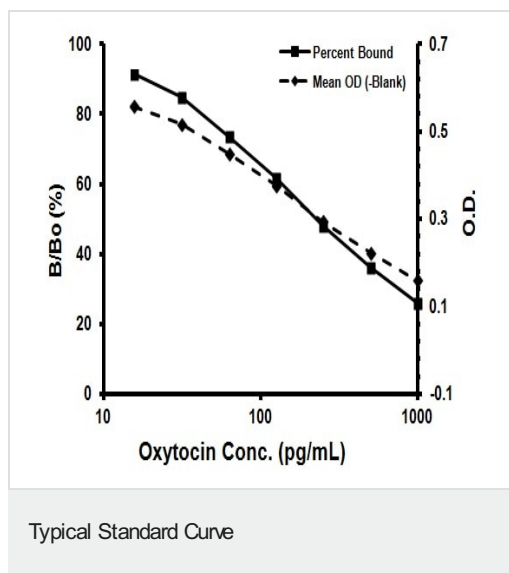
Properties

Storage instructions Please refer to protocols.

Components	1 x 96 tests
20X Wash Buffer Concentrate	1 x 27ml
Assay Buffer	1 x 27ml
Goat anti-rabbit IgG Microplate (12 x 8 wells)	1 unit
Oxytocin Alkaline Phosphatase Conjugate	1 x 5ml
Oxytocin Antibody	1 x 5ml
Oxytocin Standard	1 x 0.5ml
Plate Sealer	1 unit
pNpp Substrate	1 x 20ml
Stop Solution	1 x 5ml

Cellular localization Secreted

Images



Representative Standard Curve using ab133050.

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