

“Happy Hormone” Oxytocin ELISA Kit

Oxytocin ELISA Kit *Wako*

Oxytocin is a peptide hormone that comprises nine amino acids. It is often called the “happy hormone” or “love hormone”, as it has stress-relieving, anti-anxiety, and fear-alleviating effects and plays a role in the development of maternal behavior. It is a molecule that has attracted attention in treating mental disorders such as depression and autism or developing functional food materials. However, the assay of oxytocin used to include the need for complicated pretreatment using a C18 column, and a large amount of sample.

Oxytocin ELISA Kit *Wako* is an ELISA kit that can determine the amount of oxytocin in a sample. It overcomes issues with conventional oxytocin assays, since sample pretreatment simply requires mixing, stirring, and centrifuging of reagents, and the minimum sample amount required is 50 μL .

■ Features

- **Easy-to-use pretreatment**
Sample pretreatment requires simply adding pretreatment solutions, stirring, and centrifuging. A C18 column and organic solvent are not required.
- **Can be assayed with a tiny sample volume**
Minimum sample amount required is 50 μL (n=1).
- **Short assay time**
Assay time is 2.5 hours. Pretreatment can be done in approximately 30 minutes.
- **Can be used with a variety of samples**
Human saliva/urine/serum/plasma
Mouse or rat serum/plasma

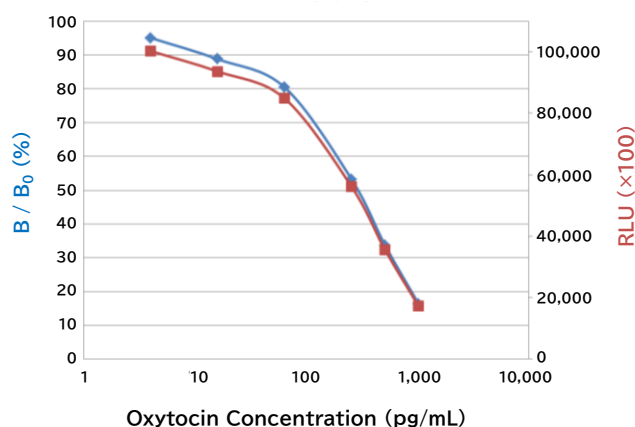
■ Kit Components

(1) Antibody-coated Plate	1 plate
(2) Oxytocin Standard	100 μL
(3) Buffer	60 mL
(4) Biotin-conjugated Oxytocin	1 bottle
(5) Peroxidase-conjugated Streptavidin Solution	100 μL
(6) Luminescent Reagent 1	6 mL
(7) Luminescent Reagent 2	6 mL
(8) Wash Solution (10 \times)	100 mL
(9) Sample Buffer 1	5 mL
(10) Sample Buffer 2	12 mL
(11) Plate Seal	4 sheets

■ Kit Performance

The range of the calibration curve	4.00~1,024 pg/mL
Assay target	Oxytocin
Sample	Human saliva/urine/serum/plasma Mouse serum/plasma Rat serum/plasma
The sample amount required	50 μL (Required amount for n=1) 200 μL (Recommended amount for n=2)
Assay time	Approximately 2.5 hours
Detection method	Luminescence (a plate reader for luminescence detection is required)

■ Example of Calibration Curve



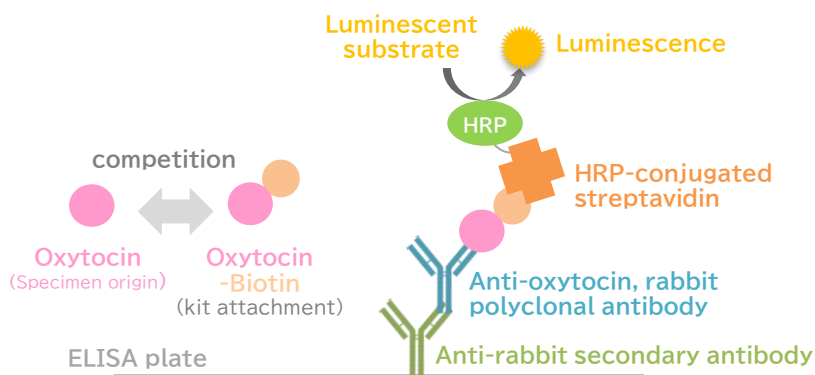
Product Number	Product Name	Grade	Package Size
292-84401	Oxytocin ELISA Kit <i>Wako</i>	for Immunochemistry	96 tests

[Requirements before your purchase]

As this product uses a competitive assay with high sensitivity, a plate shaker and a plate reader for luminescence detection are required.

■ Assay Principles

This kit is based on a competitive assay, and luminescence intensity decreases as the amount of oxytocin in the sample increases.



- (1) In advance, anti-oxytocin antibody, rabbit polyclonal antibody, and anti-rabbit secondary antibody are solid phased in each well of the assay plate.
- (2) Add oxytocin-biotin and the standard solution or the pretreated sample to wells of the assay plate. Allow them to react competitively.
- (3) Allow biotin and HRP-conjugated streptavidin to react.
- (4) Add a luminescent substrate for HRP.
- (5) Assay the oxytocin concentration in the sample by measuring HRP activity (luminescence intensity) in the wells.

■ Sample Pretreatment Methods

Pretreatment method of FUJIFILM Wako
(approximately 30 min, recovery rate: 90 – 120%)

Sample (saliva/urine/serum/plasma)
↓
Add Sample Buffer 1
↓
After stirring, allow to stand at room temperature for 10 minutes
(stir once after 5 minutes have elapsed)
↓
Add Sample Buffer 2
↓
After stirring, allow to stand at room temperature for 10 minutes
(stir once after 5 minutes have elapsed)
↓
Centrifuge
↓
Samples to be measured consist of separated supernatant

Pretreatment method of competitive company E
(approximately 2 – 4 hours, recovery rate: 42 – 110%)

Sample (saliva/urine/serum/plasma)
↓
Add trifluoroacetic acid (TFA), and stir
↓
Centrifuge
↓
Add separated supernatant to a C18 column that was equilibrated with TFA and acetonitrile
↓
Wash with TFA and elute with acetonitrile
↓
Decompress and dry the elution fraction
↓
Dissolve with buffer to make samples to be measured

■ Related Product

Product Number	Product Name	Manufacturer	Package Size
335-40841	Oxytocin	Peptide Institute Inc.	0.5mg

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