

Datasheet for ABIN3044702
Relaxin 2 ELISA Kit



[Go to Product page](#)

1 Image

Overview

Quantity:	96 tests
Target:	Relaxin 2 (RLN2)
Binding Specificity:	AA 25-53, AA 162-185
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	7.8-500 pg/mL
Minimum Detection Limit:	7.8 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Human Relaxin 2
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Immunogen sequence: Q162-C185(A)&D25-S53(B)
Specificity:	Expression system for standard: E.coli Immunogen sequence: Q162-C185(A)&D25-S53(B)
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.
Sensitivity:	<4pg/mL

Product Details

Material not included: Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target: Relaxin 2 (RLN2)

Alternative Name: RLN2 ([RLN2 Products](#))

Background: Protein Function: Relaxin is an ovarian hormone that acts with estrogen to produce dilatation of the birth canal in many mammals. May be involved in remodeling of connective tissues during pregnancy, promoting growth of pubic ligaments and ripening of the cervix.

Background: Relaxins are known endocrine and autocrine/paracrine hormones, belonging to the insulin gene superfamily. In humans there are three non-allelic relaxin genes, RLN1, RLN2 and RLN3, where RLN1 and RLN2 share high sequence homology. The active form of the protein encoded by this gene consists of an A chain and a B chain linked by disulfide bonds. Relaxin is produced by the ovary, and targets the mammalian reproductive system to ripen the cervix, elongate the pubic symphysis and inhibit uterine contraction. It may have additional roles in enhancing sperm motility, regulating blood pressure, controlling heart rate and releasing oxytocin and vasopressin. Relaxin 2(RLN2) is a polypeptide hormone structurally related to insulin and insulin-like growth factors (IGFs). However it does not interact with insulin receptors and has decidedly different biological properties. Relaxin 2 activates LGR 7 and LGR 8 relaxin receptors, that belong to the leucine-rich repeat-containing (LRR), G protein-coupled receptors.

Synonyms: Prorelaxin H2,Relaxin B chain,Relaxin A chain,RLN2,

Full Gene Name: Prorelaxin H2

Cellular Localisation: Secreted.

Gene ID: 6019

UniProt: [P04090](#)

Pathways: [Hormone Activity](#)

Application Details

Application Notes: Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.

Comment: Tissue Specificity: Isoform 1 is expressed in the ovary during pregnancy. Also expressed in

Application Details

placenta, decidua and prostate. Isoform 2 is relatively abundant in placenta. It is in much lower abundance in the prostate gland. Not detected in the ovary. .

Plate: Pre-coated

Protocol: human Relaxin 2 ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from mouse specific for Relaxin 2 has been precoated onto 96-well plates. Standards(Expression system for standard: E.coli, Immunogen sequence: Q162-C185(A) & D25-S53(B)) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Relaxin 2 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the human Relaxin 2 amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL, 31.3pg/mL, 15.6pg/mL, 7.8pg/mL human Relaxin 2 standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of human cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each human Relaxin 2 standard solution and each sample is measured in duplicate.

Restrictions: For Research Use only

Handling

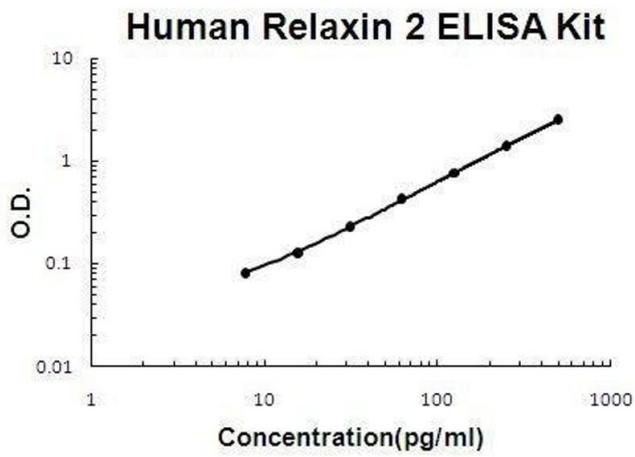
Buffer: heparin or EDTA

Handling Advice: Avoid multiple freeze-thaw cycles.

Storage: 4 °C,-20 °C

Storage Comment: Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

Expiry Date: 12 months



ELISA

Image 1. Human Relaxin 2 PicoKine ELISA Kit standard curve