# abcam

## Product datasheet

# Human Relaxin 1 ELISA Kit ab213820

### 1 Image

Overview

Product name Human Relaxin 1 ELISA Kit

**Detection method**Colorimetric

Precision

Intra-assay

| Sample | n  | Mean      | SD     | CV%    |
|--------|----|-----------|--------|--------|
| 1      | 16 | 144pg/ml  | 10.94  | = 7.6% |
| 2      | 16 | 819pg/ml  | 37.67  | = 4.6% |
| 3      | 16 | 2390pg/ml | 100.38 | = 4.2% |

Inter-assay

| Sample | n  | Mean      | SD     | CV%    |
|--------|----|-----------|--------|--------|
| 1      | 24 | 133pg/ml  | 10.5   | = 7.9% |
| 2      | 24 | 796pg/ml  | 42.98  | = 5.4% |
| 3      | 24 | 2573pg/ml | 118.35 | = 4.6% |

Sample type Cell culture supernatant, Serum, Hep Plasma

Assay type Sandwich (quantitative)

Sensitivity < 10 pg/ml

**Range** 78 pg/ml - 5000 pg/ml

Assay time 3h 30m

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Human

Product overview The Human Relaxin 1 Enzyme-Linked Immunosorbent Assay (ELISA) kit (ab213820) is designed

for the quantitative measurement of Human Relaxin 1 in cell culture supernatants, serum and

plasma (heparin).

The ELISA kit is based on standard sandwich enzyme-linked immunosorbent assay technology. A

monoclonal antibody from mouse specific for Relaxin 1 has been pre-coated onto 96-well plates. Standards (*E.coli*, R162-Cys185(A) and K26-S53(B)) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Relaxin 1 is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. HRP substrate TMB is used to visualize HRP enzymatic reaction. TMB is 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 1 amount of sample captured in plate.

**Notes** 

Relaxin 1 is a member of relaxin-like peptide family. Relaxin gene maps to human chromosome 19 near D19Mit23. Relaxin is a peptide hormone produced by the corpora lutea of ovaries during pregnancy in many mammalian species, including man. Relaxin widens the pubic bone and facilitates labor, it also softens the cervix (cervical ripening), and relaxes the uterine musculature. However, its significance may reach much further. Relaxin affects collagen metabolism, inhibiting collagen synthesis and enhancing its breakdown by increasing matrix metalloproteinases. It also enhances angiogenesis and is a potent renal vasodilator.

**Platform** 

Pre-coated microplate (12 x 8 well strips)

#### **Properties**

Storage instructions

Store at -20°C. Please refer to protocols.

| Components  | Identifier | 1 x 96 tests |
|---|------------|--------------|
| ABC Diluent Buffer                                    | Blue Cap   | 1 x 12ml     |
| Adhesive Plate Seal                                   |            | 4 units      |
| Antibody Diluent Buffer                               | Green Cap  | 1 x 12ml     |
| Anti-Human Relaxin 1 coated Microplate (12 x 8 wells) |            | 1 unit       |
| Avidin-Biotin-Peroxidase Complex (ABC)                |            | 1 x 100µl    |
| Biotinylated anti-Human Relaxin 1 antibody            |            | 1 x 100µl    |
| Lyophilized recombinant Human Relaxin 1 standard      |            | 2 vials      |
| Sample Diluent Buffer                                 | Green Cap  | 1 x 30ml     |
| TMB Color Developing Agent                            | Black Cap  | 1 x 10ml     |
| TMB Stop Solution                                     | Yellow Cap | 1 x 10ml     |

**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,

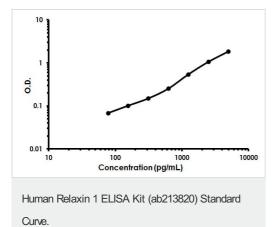
promoting growth of pubic ligaments and ripening of the cervix.

**Tissue specificity** Prostate. Not expressed in placenta, decidua or ovary.

**Sequence similarities**Belongs to the insulin family.

Cellular localization Secreted.

#### **Images**



Human Relaxin 1 ELISA Kit (ab213820) Standard Curve.

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