

Relaxin 1/2 (N-18): sc-20491

BACKGROUND

Relaxin 1 (also referred to as Relaxin or RLXH1) is a peptide hormone produced by the corpora lutea of the ovary during pregnancy in many mammalian species, including human. The secretion of the hormone into the blood stream just before parturition results in a marked softening and lengthening of the pubic symphysis and a softening of the cervix, which facilitates the birth process. By inhibiting uterine contractions, Relaxin 1 may influence the timing of parturition. Like Insulin, Relaxin 1 consists of two peptide chains, A and B, covalently linked by disulfide bonds. By further analogy to Insulin, the two peptides are synthesized as a single-chain precursor polypeptide with the B chain at the amino-terminus. The gene that encodes the human Relaxin 1 protein maps to chromosome 9. Relaxin 2, a related protein, is selectively expressed in the ovary during pregnancy. The gene that encodes the human Relaxin 2 protein also maps to chromosome 9.

REFERENCES

- Hudson, P., et al. 1981. Molecular cloning and characterization of cDNA sequences coding for rat relaxin. *Nature* 291: 127-131.
- Hudson, P., et al. 1983. Structure of a genomic clone encoding biologically active human relaxin. *Nature* 301: 628-631.
- Hudson, P., et al. 1984. Relaxin gene expression in human ovaries and the predicted structure of a human preprorelaxin by analysis of cDNA clones. *EMBO J.* 3: 2333-2339.
- Crawford, R.J., et al. 1984. Two human relaxin genes are on chromosome 9. *EMBO J.* 3: 2341-2345.
- Masini, E., et al. 2002. Protective effect of relaxin in cardiac anaphylaxis: involvement of the nitric oxide pathway. *Br. J. Pharmacol* 137: 337-344.
- Conrad, K.P., et al. 2004. Relaxin modifies systemic arterial resistance and compliance in conscious, nonpregnant rats. *Endocrinology* 145: 3289-3296.
- Samuel, C.S., et al. 2004. Relaxin modulates cardiac fibroblast proliferation, differentiation, and collagen production and reverses cardiac fibrosis *in vivo*. *Endocrinology* 145: 4125-4133.

CHROMOSOMAL LOCATION

Genetic locus: RLN1/RLN2 (human) mapping to 9q12.

SOURCE

Relaxin 1/2 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Relaxin 1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-20491 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

Relaxin 1/2 (N-18) is recommended for detection of Relaxin 1 and Relaxin 2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Relaxin 1/2 siRNA (h): sc-44075, Relaxin 1/2 shRNA Plasmid (h): sc-44075-SH and Relaxin 1/2 shRNA (h) Lentiviral Particles: sc-44075-V.

Molecular Weight of Relaxin 1: 6 kDa.

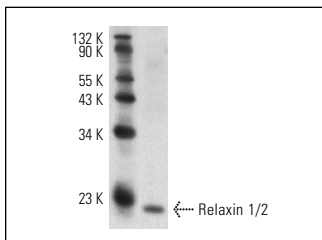
Molecular Weight of Relaxin 2: 21 kDa.

Positive Controls: LNCaP cell lysate: sc-2231.

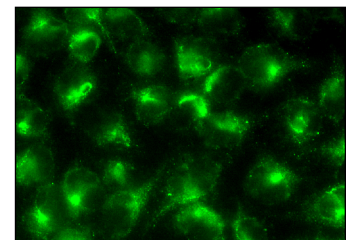
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/ 2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Relaxin 1/2 (N-18): sc-20491. Western blot analysis of Relaxin expression in LNCaP whole cell lysate.



Relaxin 1/2 (N-18): sc-20491. Immunofluorescence staining of methanol-fixed HeLa cells showing cell surface localization.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

MONOS
Satisfaction
Guaranteed

Try **Relaxin 1/2 (8H11kurd): sc-57424**, our highly recommended monoclonal alternative to Relaxin 1/2 (N-18).