

Relaxin Receptor 1 (T-20): sc-22009

BACKGROUND

G protein-coupled receptors (GPRs) are a protein family of transmembrane receptors that transmit an extracellular signal (ligand binding) into an intracellular signal (G protein activation). Relaxin Receptor 1, also known as Relaxin/insulin-like family peptide receptor 1, RXFP1, LGR7 or RXFP1, is a leucine-rich repeat G protein-coupled receptor that binds Relaxins and INSL3 (insulin-like peptide 3). Expressed in brain, placenta, uterus, kidney, prostate, testis, adrenal, heart, ovary and skin, Relaxin Receptor 1 localizes to the cell membrane and contains ten LRR (leucine-rich repeats) and an LDL-receptor class A domain. Upon Relaxin or INSL3 binding to Relaxin Receptor 1, adenylylate (A) cyclase is activated, leading to an increased intracellular concentration of cAMP. cAMP is a key intracellular regulator; it mediates the activities of numerous hormones, including ACTH, Glucagon and epinephrine, and plays an important role in modulating cellular activity. Due to alternative splicing events, two Relaxin Receptor 1 isoforms are expressed.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RXFP1 (human) mapping to 4q32.1.

RESEARCH USE

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

SOURCE

Relaxin Receptor 1 (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Relaxin Receptor 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-22009 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Relaxin Receptor 1 (T-20) is recommended for detection of Relaxin Receptor 1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 Receptor 1 siRNA (h): sc-40177, Relaxin Receptor 1 shRNA Plasmid (h): sc-40177-SH and Relaxin Receptor 1 shRNA (h) Lentiviral Particles: sc-40177-V.

Molecular Weight of Relaxin Receptor 1 precursor: 80 kDa.

Molecular Weight of mature Relaxin Receptor 1: 95 kDa.

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) 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.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Relaxin Receptor 1 (3E3): sc-293228**, our highly recommended monoclonal alternative to Relaxin Receptor 1 (T-20).