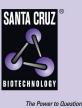
SANTA CRUZ BIOTECHNOLOGY, INC.

Relaxin Receptor 4 (N-17): sc-48184



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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). GPR signaling is an evolutionarily ancient mechanism used by all eukaryotes to sense environmental stimuli and mediate cell-cell communication. All of the receptors have seven membrane-spanning domains and the extracellular parts of the receptor can be glycosylated. These extracellular loops also contain two highly conserved cysteine residues which create disulfide bonds to stabilize the receptor structure. Relaxin Receptor 4, also known as Relaxin/insulin-like family peptide receptor 4, RXFP4, RLN3R2, GPCR142 or GPR100, is a G protein-coupled receptor that binds Relaxin 3 and is specifically expressed in peripheral tissues, particularly in the colon.

REFERENCES

- O'Banion, M.K. and Young, D.A. 1991. Bovine papillomavirus type 1 alters the processing of host glucose- and calcium-modulated endoplasmic reticulum proteins. J. Virol. 65: 3481-3488.
- 2. 1992. Two new fluoroquinolones. Med. Lett. Drugs Ther. 34: 58-60.
- Menoret, A., Meflah, K. and Le Pendu, J. 1994. Expression of the 100 kDa glucose-regulated protein (GRP100/endoplasmin) is associated with tumorigenicity in a model of rat colon adenocarcinoma. Int. J. Cancer 56: 400-405.
- Chen, J., Kuei, C., Sutton, S.W., Bonaventure, P., Nepomuceno, D., Eriste, E., Sillard, R., Lovenberg, T.W. and Liu, C. 2004. Pharmacological characterization of relaxin-3/INSL7 receptors GPCR135 and GPCR142 from different mammalian species. J. Pharmacol. Exp. Ther. 312: 83-95.
- Liu, C., Kuei, C., Sutton, S., Chen, J., Bonaventure, P., Wu, J., Nepomuceno, D., Kamme, F., Tran, D.T., Zhu, J., Wilkinson, T., Bathgate, R., Eriste, E., Sillard, R. and Lovenberg, T.W. 2004. INSL5 is a high affinity specific agonist for GPCR142 (GPR100). J. Biol. Chem. 280: 292-300.
- Leeb-Lundberg, L.M. 2004. Bradykinin specificity and signaling at GPR100 and B2 kinin receptors. Br. J. Pharmacol. 143: 931-932.
- Meini, S., Bellucci, F., Cucchi, P., Giuliani, S., Quartara, L., Giolitti, A., Zappitelli, S., Rotondaro, L., Boels, K. and Maggi, C.A. 2004. Bradykinin B2 and GPR100 receptors: a paradigm for receptor signal transduction pharmacology. Br. J. Pharmacol. 143: 938-941.

CHROMOSOMAL LOCATION

Genetic locus: RLN3R2 (human) mapping to 1q22.

SOURCE

Relaxin Receptor 4 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Relaxin Receptor 4 of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-48184 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Relaxin Receptor 4 (N-17) is recommended for detection of Relaxin Receptor 4 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Relaxin Receptor 4 (N-17) is also recommended for detection of Relaxin Receptor 4 in additional species, including bovine and porcine.

Suitable for use as control antibody for Relaxin Receptor 4 siRNA (h): sc-60727, Relaxin Receptor 4 shRNA Plasmid (h): sc-60727-SH and Relaxin Receptor 4 shRNA (h) Lentiviral Particles: sc-60727-V.

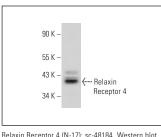
Molecular Weight of Relaxin Receptor 4: 41 kDa.

Positive Controls: JEG-3 whole cell lysate: sc-364255.

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 Receptor 4 (N-17): sc-48184. Western blot analysis of Relaxin Receptor 4 expression in JEG-3 whole cell lysate.

RESEARCH USE

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