SANTA CRUZ BIOTECHNOLOGY, INC.

Relaxin Receptor 3 (H-135): sc-98725

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Relaxin Receptor 3 (also known as Relaxin/Insulin-like family peptide receptor 3, RXFP3, RLN3R1, GPCR135 and SALPR) is a G protein-coupled receptor that binds Relaxin 3 and influences differentiation and maintenance of the nervous system. Relaxin Receptor 3 shares sequence similarity with Somatostatin receptors and Angiotensin receptors. It mediates central processing of sensory signals in the rat and is thought to be a modulator of stress responses. Relaxin Receptor 3 is present in the brain, with highest expression in substantia nigra and pituitary, followed by hippocampus, spinal cord, amygdala, caudate nucleus and corpus callosum, and low level expression in cerebellum. In peripheral tissues there are high levels in adrenal glands and low levels in pancreas, salivery gland, placenta, mammary gland and testis.

REFERENCES

1. Liu, C., et al. 2003. Identification of Relaxin 3/INSL7 as an endogenous ligand for the orphan G protein-coupled receptor GPCR135. J. Biol. Chem. 278: 50754-50764.
2. Boels, K., et al. 2004. Identification of a mouse orthologue of the G protein-coupled receptor SALPR and its expression in adult mouse brain and during development. Brain Res. Dev. Brain Res. 152: 265-268.
3. Sutton, S.W., et al. 2004. Distribution of G protein-coupled receptor GPCR135 binding sites and receptor mRNA in the rat brain suggests a role for Relaxin 3 in neuroendocrine and sensory processing. Neuroendocrinology 80: 298-307.
4. Van der Westhuizen, E.T., et al. 2005. Responses of GPCR135 to human gene 3 (H3) Relaxin in CHO-K1 cells determined by microphysiometry. Ann. N.Y. Acad. Sci. 1041: 332-337.
5. Liu, C., et al. 2005. Relaxin 3/insulin-like peptide 5 chimeric peptide, a selective ligand for G protein-coupled receptor GPCR135 and GPCR142 over leucine-rich repeat-containing G protein-coupled receptor 7. Mol. Pharmacol. 67: 231-240.
6. Chen, J., et al. 2005. Pharmacological characterization of Relaxin 3/INSL7 receptors GPCR135 and GPCR142 from different mammalian species. J. Pharmacol. Exp. Ther. 312: 83-95.

CHROMOSOMAL LOCATION

Genetic locus: RXFP3 (human) mapping to 5p13.3; Rxfp3 (mouse) mapping to 15 A1.

SOURCE

Relaxin Receptor 3 (H-135) is a rabbit polyclonal antibody raised against amino acids 1-135 mapping at the N-terminus of Relaxin Receptor 3 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.

RESEARCH USE

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

APPLICATIONS

Relaxin Receptor 3 (H-135) is recommended for detection of Relaxin Receptor 3 of mouse, rat and 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).

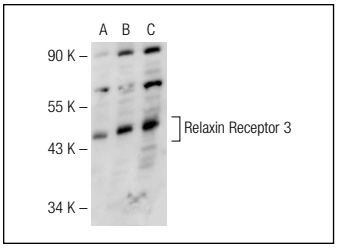
Relaxin Receptor 3 (H-135) is also recommended for detection of Relaxin Receptor 3 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for Relaxin Receptor 3 siRNA (h): sc-60717, Relaxin Receptor 3, siRNA (m): sc-60718, Relaxin Receptor 3, shRNA Plasmid (h): sc-60717-SH, Relaxin Receptor 3, shRNA Plasmid (m): sc-60718-SH, Relaxin Receptor 3, shRNA (h) Lentiviral Particles: sc-60717-V and Relaxin Receptor 3 shRNA (m) Lentiviral Particles: sc-60718-V.

Molecular Weight of Relaxin Receptor 3: 52 kDa.

Positive Controls: Relaxin Receptor 3 (h2): 293T Lysate: sc-177855.

DATA



Relaxin Receptor 3 (H-135): sc-98725. Western blot analysis of Relaxin Receptor 3 expression in non-transfected 293T: sc-117752 (**A**), human Relaxin Receptor 3 transfected 293T: sc-177855 (**B**) and HeLa (**C**) whole cell lysates.

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.