



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

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, salivary 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 (GPCR)135 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 5p13.2.

PRODUCT

Relaxin Receptor 3 (h2): 293T Lysate represents a lysate of human Relaxin Receptor 3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

APPLICATIONS

Relaxin Receptor 3 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Relaxin Receptor 3 antibodies. Recommended use: 10-20 µl per lane.

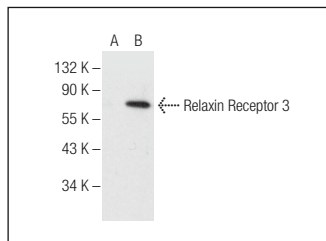
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Relaxin Receptor 3 (D-10): sc-377365 is recommended as a positive control antibody for Western Blot analysis of enhanced human Relaxin Receptor 3 expression in Relaxin Receptor 3 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Relaxin Receptor 3 (D-10): sc-377365. Western blot analysis of Relaxin Receptor 3 expression in non-transfected: sc-117752 (A) and human Relaxin Receptor 3 transfected: sc-177855 (B) 293T whole cell lysates.

PROTOCOLS

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