## SANTA CRUZ BIOTECHNOLOGY, INC.

# Relaxin Receptor 3 (D-10): sc-377365



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 proteincoupled 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.

## CHROMOSOMAL LOCATION

Genetic locus: RXFP3 (human) mapping to 5p13.2; Rxfp3 (mouse) mapping to 15 A1.

#### SOURCE

Relaxin Receptor 3 (D-10) is a mouse monoclonal antibody raised against amino acids 1-135 mapping at the N-terminus of Relaxin Receptor 3 of human origin.

#### PRODUCT

Each vial contains 200  $\mu g~lgG_1$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Relaxin Receptor 3 (D-10) is available conjugated to agarose (sc-377365 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-377365 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377365 PE), fluorescein (sc-377365 FITC), Alexa Fluor<sup>®</sup> 488 (sc-377365 AF488), Alexa Fluor<sup>®</sup> 546 (sc-377365 AF546), Alexa Fluor® 594 (sc-377365 AF594) or Alexa Fluor® 647 (sc-377365 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-377365 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-377365 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

## **STORAGE**

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

## **APPLICATIONS**

Relaxin Receptor 3 (D-10) is recommended for detection of Relaxin Receptor 3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 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, HeLa whole cell lysate: sc-2200 or SW-13 cell lysate: sc-24778.

## **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<sup>®</sup> Blocking Reagent: sc-516214 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 m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-lgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA





Relaxin Receptor 3 (D-10): sc-377365. Western blot analysis of Relaxin Receptor 3 expression in nontransfected 293T: sc-117752 (A), human Relaxin Receptor 3 transfected 293T: sc-177855 (B), SW-13 (C), U-87 MG (D), HeLa (E) and GH3 (F) whole cell lysates

Relaxin Receptor 3 (D-10): sc-377365. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing cytoplasmic staining of glandular cells

## **RESEARCH USE**

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