

NPY4-R (H-43): sc-98934

BACKGROUND

Pancreatic polypeptide (PP), neuropeptide Y (NPY), and peptide YY (PYY) are related 36-amino acid hormones. A number of structurally related receptors for these peptides have been isolated, NPY1-R, NPY2-R, NPY3-R, NPY4-R, NPY5-R and NPY6-R. NPY4-R is expressed in several human tissues, including brain, coronary artery and ileum. NPY4-R maps to human chromosome 10q11.22. NPY5-R, isolated from rat hypothalamus, encodes a 456 amino acid protein with less than 35% overall identity to known Y-type receptors. The human NPY5-R sequence is nearly identical to, but in the opposite orientation from, that of the human NPY1-R sequence. NPY5-R localizes to the paraventricular hypothalamic nucleus, the lateral hypothalamus, and other locations consistent with a role in the control of feeding behavior. The gene which encodes NPY5-R maps to human chromosome 4q32.2. NPY6-R is abundantly expressed in human heart and skeletal muscle and the gene which encodes NPY6-R maps to human chromosome 5q31.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PPYR1 (human) mapping to 10q11.22; Ppyr1 (mouse) mapping to 14 B.

SOURCE

NPY4-R (H-43) is a rabbit polyclonal antibody raised against amino acids 74-116 mapping near the N-terminus of NPY4-R 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.

APPLICATIONS

NPY4-R (H-43) is recommended for detection of NPY4-R 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).

NPY4-R (H-43) is also recommended for detection of NPY4-R in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NPY4-R siRNA (h): sc-42103, NPY4-R siRNA (m): sc-42104, NPY4-R shRNA Plasmid (h): sc-42103-SH, NPY4-R shRNA Plasmid (m): sc-42104-SH, NPY4-R shRNA (h) Lentiviral Particles: sc-42103-V and NPY4-R shRNA (m) Lentiviral Particles: sc-42104-V.

Molecular Weight of NPY4-R: 42 kDa.

Positive Controls: Mouse brain extract: sc-2253 or rat ovary extract: sc-2399.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (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.

RESEARCH USE

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