# NPY5-R (N-20): sc-23843



The Power to Question

# **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 10q11.2. NPY-5R, isolated from rat hypothalamus, encodes a 456 amino acid protein with less than 35% overall identity to known Y-type receptors. The human NPY-5R sequence is nearly identical to, but in the opposite orientation from, that of the human NPY-1R 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 NPY-5R maps to human chromosome 4q32.2. NPY-6R is abundantly expressed in human heart and skeletal muscle and the gene which encodes NPY-6R maps to human chromosome 5q31.

# CHROMOSOMAL LOCATION

Genetic locus: NPY5R (human) mapping to 4q32.2; Npy5r (mouse) mapping to 8 B3.2.

#### SOURCE

NPY5-R (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of NPY5-R of human origin.

### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-23843 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

# **APPLICATIONS**

NPY5-R (N-20) is recommended for detection of NPY5-R of human and, to a lesser extent, mouse and rat 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), 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).

NPY5-R (N-20) is also recommended for detection of NPY5-R in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NPY5-R siRNA (h): sc-42105, NPY5-R siRNA (m): sc-42106, NPY5-R shRNA Plasmid (h): sc-42105-SH, NPY5-R shRNA Plasmid (m): sc-42106-SH, NPY5-R shRNA (h) Lentiviral Particles: sc-42105-V and NPY5-R shRNA (m) Lentiviral Particles: sc-42106-V.

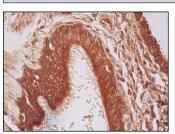
Molecular Weight of NPY5-R: 57 kDa.

Positive Controls: Ramos cell lysate: sc-2216, MIA PaCa-2 cell lysate: sc-2285 or SK-N-SH cell lysate: sc-2410.

#### **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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

#### DATA



NPY5-R (N-20): sc-23843. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bronchus tissue showing cytoplasmic and membrane staining of respiratory epithelial cells.

# **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.

#### **PROTOCOLS**

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



Try **NPY5-R (H-4):** sc-137167, our highly recommended monoclonal alternative to NPY5-R (N-20).

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