

Peptide YY (N-15): sc-47318

BACKGROUND

Members of the Neuropeptide Y (NPY) hormone family include NPY, PP (pancreatic polypeptide) and Peptide YY. The NPY hormone family associates with the complementary Neuropeptide Y-receptor family, which is part of the G protein-coupled receptor superfamily. NPY is expressed throughout the central and peripheral nervous systems and is one of the most abundant neuropeptides. Peptide YY (PPY), also designated peptide tyrosine tyrosine, is a secreted protein. This gut protein acts as an inhibitor of exocrine pancreatic secretion, jejunal motility and colonic motility. It also plays a role in vasoconstriction.

REFERENCES

1. Tatemoto, K., et al. 1988. Isolation and primary structure of human Peptide YY. *Biochem. Biophys. Res. Commun.* 157: 713-717.
2. Eberlein, G.A., et al. 1989. A new molecular form of PYY: structural characterization of human PYY(3-36) and PYY(1-36). *Peptides* 10: 797-803.
3. Kohri, K., et al. 1993. Cloning and structural determination of human Peptide YY cDNA and gene. *Biochim. Biophys. Acta* 1173: 345-349.
4. Abbott, C.R., et al. 2005. The inhibitory effects of peripheral administration of Peptide YY(3-36) and glucagon-like peptide-1 on food intake are attenuated by ablation of the vagal-brainstem-hypothalamic pathway. *Brain Res.* 1044: 127-131.
5. Renshaw, D. and Batterham, R.L. 2005. Peptide YY: a potential therapy for obesity. *Curr. Drug Targets* 6: 171-179.
6. Talebizadeh, Z., et al. 2005. Ghrelin, Peptide YY and their receptors: gene expression in brain from subjects with and without Prader-Willi syndrome. *Int. J. Mol. Med.* 15: 707-711.

CHROMOSOMAL LOCATION

Genetic locus: PYY (human) mapping to 17q21.1; Pyy (mouse) mapping to 11 D.

SOURCE

Peptide YY (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Peptide YY 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.

Blocking peptide available for competition studies, sc-47318 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

Peptide YY (N-15) is recommended for detection of Peptide YY precursor and mature PYY of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Suitable for use as control antibody for Peptide YY siRNA (h): sc-61320, Peptide YY siRNA (m): sc-61321, Peptide YY shRNA Plasmid (h): sc-61320-SH, Peptide YY shRNA Plasmid (m): sc-61321-SH, Peptide YY shRNA (h) Lentiviral Particles: sc-61320-V and Peptide YY shRNA (m) Lentiviral Particles: sc-61321-V.

Molecular Weight of Peptide YY: 11 kDa.

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) 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.

SELECT PRODUCT CITATIONS

1. Frisch, C., et al. 2009. Positive correlation between the density of neuropeptide y positive neurons in the amygdala and parameters of self-reported anxiety and depression in mesiotemporal lobe epilepsy patients. *Biol. Psychiatry* 66: 433-440.

RESEARCH USE

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



Try **Peptide YY (029-01-1): sc-80499**, our highly recommended monoclonal alternative to Peptide YY (N-15).