

Product Specification Sheet

Peptide YY (PYY) Antibodies

Cat. # PYY11-P	Mouse PYY1 control/blocking peptide # 1	SIZE: 100 ug
Cat. # PYY11-A	Rabbit Anti-Mouse PYY1 IgG # 1 (aff pure)	SIZE: 100 ug

Neuropeptide Y (**NPY**), a neuropeptide colocalized and abundantly released with the neurotransmitter norepinephrine in nervous system, synthesized by postnatal olfactory epithelium of sustentacular cells. It promotes the proliferation of postnatal neuronal precursor cells and exhibits a diverse range of important physiologic activities, including effects on psychomotor activity, food intake, regulation of central endocrine secretion, and potent vasoactive effects on the cardiovascular system.

NPY a 97aa peptide in mouse, human (chr 7p15.1) and 98aa in rat has a mol. wt of 11kD. NPY shows sequence homology to Peptide YY (PYY) and over 50% homology in amino acid and nucleotide sequence to Pancreatic Polypeptide (PNP or PPY), all of these homologous peptides have a 36aa mature peptide characterized by a hairpin loop.

PYY: Secreted as 97aa precursor from endocrine cells in the lower small intestine, colon, and pancreas. It acts on the gastrointestinal tract as an inhibitor of gastric acid secretion, gastric emptying, and digestive enzyme secretion by the pancreas, and gut motility.

FUNCTION: This gut peptide inhibits exocrine pancreatic secretion, has a vasoconstrictory action and inhibits jejunal and colonic mobility.

SUBCELLULAR LOCATION: Secreted.

SIMILARITY: Belongs to the NPY family.

Protein name Peptide YY [Precursor]

Synonyms PYY

Peptide tyrosine tyrosine

Gene name Name: Pyy

Source of Antigen and Antibodies

Antigen	9-aa peptide from Mouse PYY1 (1); (protein accession #Q9EPS2, refs 1) Designation (PYY11-P, control peptide) conjugated to KLH; Epitope location ~ Mature Peptide region
Ab Host/type	Rabbit, Polyclonal Aff pure IgG (cat # PYY11-A) purified over the antigen column
Ab Format	Cat # 20320, goat anti-rabbit IgG-HRP (AP, biotin, FITC conjugates also available)
-ve control	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

Form & Storage of Antibodies/Peptide Control

Affinity pure IgG
100 ug/100ul solution lyophilized powder
Supplied in **Buffer:** PBS+0.1% BSA

Reconstitute powder in PBS at 1mg/ml

Control/blocking peptide

100 ug/100 ul solution lyophilized powder

Supplied in Buffer: PBS pH 7.5,

Reconstitute powder in PBS at 1 mg/ml.

Storage

Short-term: unopened, undiluted liquid vials at -20°C and powder at 4°C or -20°C..

Long-term: at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20°C or below.

Shipping: 4°C for solutions and room temp for powder

Recommended Usage

Western Blotting (1-10 ug/ml for affinity pure antibody using ECL technique).

ELISA: Control peptide can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (0.5-1 ug/ml for affinity pure).

Histochemistry & Immunofluorescence: Not tested. We recommend the use of aff pure IgG at 2-20 ug/ml.

Specificity & Cross-reactivity

The mPYY11-P control peptide is 100% identical to rat PYY1. Antibody cross-reactivity in various species has not been studied. Control peptide, because of its low mol. Wt (<3 kDa), is not suitable for Western. It should be used for ELISA or antibody blocking experiments (use 5-10 ug control peptide per 1 ug of aff pure IgG or 1 ul antiserum) to confirm antibody specificity

General References: Batterham R. L et al (2002) Nature 418: 650-653; Hort Y. Baker (1995) Genomics 26: 77-83; Thiele, T. E et al (1998) Nature 396: 366-369; Maccarrone C. D et al (1986) Neurochem. Int 8: 13-22.

*This product is for In vitro research use only.

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PYY11-A-P 709113J