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PYY Rabbit pAb

Catalog # AP97840

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	P10082
Other Accession	P10082
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	11145
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide human Peptide YY
Epitope Specificity	29-64/97
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the NPY family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Peptide tyrosine tyrosine (PYY) was originally isolated from porcine gut, which exhibits striking sequence homology with members of the pancreatic polypeptide family, including neuropeptide tyrosine (NPY). The peptide is localized to enteroglucagon containing (L/EG) and pancreatic (A) cells in many mammalian and non-mammalian species. PYY gene expression is upregulated by various growth factors, including growth hormone and insulin-like growth factor and the physiological effects of PYY are mediated by G-protein (G alpha i2) coupled Y-type receptors ('Y2 receptors of a PYY preferring subtype'). Various actions have been reported for PYY, including the inhibition of upper intestinal and exocrine pancreatic secretion, small intestinal water flux and as the mediator for the fat-induced ileal brake. Recently, the infusion of normal postprandial concentrations of PYY[3-36] into human volunteers has been shown to significantly decrease appetite and reduce food intake, possibly via Y2R in the arcuate nucleus. Immunohistochemical studies on mice have shown that PYY is the earliest detectable peptide in both pancreatic islets and colonic endocrine cells which suggest that PYY may be a useful marker for endocrine progenitor cells. This gene encodes a member of the neuropeptide Y (NPY) family of peptides. The encoded preproprotein is proteolytically processed to generate two alternative peptide products that differ in length by three amino acids. These peptides, secreted by endocrine cells in the gut, exhibit different binding affinities for each of the neuropeptide Y receptors. Binding of the encoded peptides to these receptors mediates regulation of pancreatic secretion, gut mobility and energy homeostasis. Rare variations in this gene could increase susceptibility to obesity and elevated serum levels of the encoded peptides may be associated with anorexia nervosa. [provided by RefSeq, Feb 2016] PYY1-36(human): Tyr-Pro-Ile-Lys-Pro-Glu-Ala-Pro-Gly-Glu-Asp-Ala-Ser-Pro-Glu-Glu-Leu-Asn-Arg-Tyr-Tyr-Ala-Ser-Leu-Arg-His-Tyr-Leu-Asn-Leu-Val-Thr-Arg-Gln-Arg-Tyr-NH2 CAS Number: 118997-30-1; Empirical Formula (Hill Notation): C194H295N55O57; Molecular Weight: 4309.75

Additional Information

Gene ID	5697
Other Names	PYY-I; PYY1; GHYY; RATGHYY; Yy; peptide-YY; PYY_CANLF; PYY; Peptide tyrosine tyrosine; PYY_HUMAN; PYY_MOUSE; PYY_PIG; PYY_RABIT; PYY_RAT; peptide YY; prepro-PYY
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	PYY
Function	[Peptide YY]: Ligand for neuropeptide Y receptor type 1 (NPY1R) and neuropeptide Y receptor type 2 (NPY2R) (PubMed:1317848, PubMed:7592910, PubMed:36525977). Also binds NPY5R (By similarity). Receptor binding induces adenylate cyclase-inhibiting G protein-coupled receptor signaling, resulting in inhibition of cAMP production (PubMed:1317848, PubMed:7592910). Receptor activation by PYY also leads to an increase of intracellular Ca(2+) levels (PubMed:1317848, PubMed:36525977, PubMed:7592910). This gut peptide inhibits exocrine pancreatic secretion (By similarity). Involved in the regulation of colonic antisecretory tone, and colonic contractility (By similarity).
Cellular Location	[Peptide YY]: Secreted

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.