

PACAP-27/38 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP50858

Product Information

Application WB, IHC-P, IHC-F, IF, E

Primary Accession P18509

Reactivity Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 18835
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human PACAP-27/38

Epitope Specificity 132-169/176

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Extracellular region or secreted Belongs to the glucagon family.

SUBUNIT Interacts with ADCYAP1R1 (via N-terminal extracellular domain).

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions This gene encodes a secreted proprotein that is further processed into

multiple mature peptides. These peptides stimulate adenylate cyclase and increase cyclic adenosine monophosphate (cAMP) levels, resulting in the transcriptional activation of target genes. The products of this gene are key mediators of neuroendocrine stress responses. Alternative splicing results in

multiple transcript variants. [provided by RefSeq, Feb 2013]

Additional Information

Gene ID 116

Other Names Pituitary adenylate cyclase-activating polypeptide, PACAP, PACAP-related

peptide, PRP-48, Pituitary adenylate cyclase-activating polypeptide 27, PACAP-27, PACAP27, Pituitary adenylate cyclase-activating polypeptide 38,

PACAP-38, PACAP38, ADCYAP1

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000

-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

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 ADCYAP1 (HGNC:241)

Function PACAP is a neuropeptide involved in diverse array of physiological processes

through activating the PACAP subfamily of class B1 G protein-coupled receptors: VIP receptor 1 (VIPR1), VIP receptor 2 (VIPR2), and PACAP type I

receptor (ADCYAP1R1) (PubMed:11175907, PubMed:23800469,

PubMed:32047270, PubMed:36385145). Exerts neuroprotective and general cytoprotective effects due to anti- apoptotic, anti-inflammatory, and

antioxidant actions (PubMed: 23800469). Promotes neuron projection development through the PARGEE2/Pap1/R-Paf/EPK pathway

development through the RAPGEF2/Rap1/B-Raf/ERK pathway (PubMed:23800469). In chromaffin cells, induces long-lasting in

(PubMed:<u>23800469</u>). In chromaffin cells, induces long-lasting increase of intracellular calcium concentrations and neuroendocrine secretion (By similarity). Involved in the control of glucose homeostasis, induces insulin secretion by pancreatic beta cells (By similarity). PACAP exists in two bioactive

forms from proteolysis of the same precursor protein, PACAP27 and PACAP38, which differ by eleven amino acid residues in the C-terminus

(PubMed:32047270).

Cellular Location Secreted.

Background

Binding to its receptor activates G proteins and stimulates adenylate cyclase in pituitary cells. Promotes neuron projection development through the RAPGEF2/Rap1/B-Raf/ERK pathway.

References

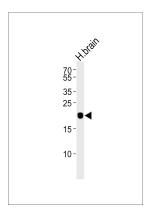
Ohkubo S.,et al.DNA Cell Biol. 11:21-30(1992). Hosoya M.,et al.Biochim. Biophys. Acta 1129:199-206(1992). Ota T.,et al.Nat. Genet. 36:40-45(2004). Kimura C.,et al.Biochem. Biophys. Res. Commun. 166:81-89(1990). Emery A.C.,et al.Sci. Signal. 6:RA51-RA51(2013).

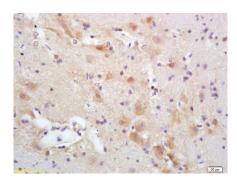
Images

Image not found: 201410/AP50858_IHC-P_1.jpg

Formalin-fixed and paraffin embedded rat brain labeled with Rabbit Anti CYP5A1/Thromboxane synthase Polyclonal Antibody, Unconjugated (bs-4019R) at 1:200 followed by conjugation to the secondary antibody and DAB staining

Western blot analysis of lysate from human brain tissue lysate, using PACAP-27/38 Antibody(AP50858). AP50858 was diluted at 1:500. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.





Tissue/cell: human colon carcinoma; 4%
Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer at 37°C for 20 min; Incubation: Anti-PACAP-27/38 Polyclonal Antibody, Unconjugated 1:200, overnight at 4°C, followed by conjugation to the secondary antibody and DAB staining

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