10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ADCYAP1 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8670b

Product Information

Application	WB, E
Primary Accession	P18509
Reactivity	Human
Predicted	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,κ
Clone Names	1996CT329.45.62
Calculated MW	18835

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
Target/Specificity	This ADCYAP1 antibody is generated from a mouse immunized with a recombinant protein from the human region of human ADCYAP1.
Dilution	WB~~1:8000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ADCYAP1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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:32004469, 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 RAPGEF2/Rap1/B-Raf/ERK pathway (PubMed:23800469). 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, PubMed:32004469).

Cellular Location Secreted.

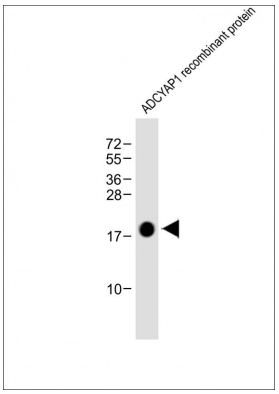
Background

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



Anti-ADCYAP1 Antibody at 1:8000 dilution + ADCYAP1 recombinant protein Lysates/proteins at 20ng per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 18 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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