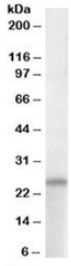
PACAP Antibody / Adenylate Cyclase Activating Polypeptide Antibody (R34103)

Catalog No.	Formulation	Size
R34103-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat, Dog, Pig, Cow
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	116
Applications	Western blot: 1-3ug/ml ELISA (peptide) LOD: 1:2000
Limitations	This PACAP antibody is available for research use only.



PACAP Antibody Human Hippocampus WB. Western blot analysis of human hippocampus lysate using PACAP antibody at 1 ug/ml. A distinct immunoreactive band is detected at approximately 21 kDa. Although the predicted molecular weight of the ADCYAP1 precursor is approximately 19 kDa, migration at approximately 21-25 kDa has been reported and may reflect precursor processing, post-translational modification, or differences in electrophoretic mobility. This result demonstrates that the PACAP antibody is suitable for detecting endogenous adenylate cyclase activating polypeptide in human brain tissue.

Description

PACAP Antibody / Adenylate Cyclase Activating Polypeptide Antibody recognizes pituitary adenylate cyclase activating polypeptide (PACAP), a highly conserved neuropeptide encoded by the ADCYAP1 gene. Following proteolytic processing of its precursor protein, PACAP is produced primarily as the biologically active PACAP-38 and PACAP-27 peptides, which

function through PAC1, VPAC1, and VPAC2 receptors to regulate cyclic AMP-dependent signaling. PACAP is expressed throughout the central and peripheral nervous systems as well as in endocrine, gastrointestinal, and reproductive tissues. A PACAP Antibody provides an important tool for studying neuropeptide signaling and neuroendocrine regulation.

Adenylate Cyclase Activating Polypeptide participates in numerous physiological processes including neurotransmission, hormone secretion, neuronal differentiation, synaptic plasticity, circadian rhythm regulation, and cellular survival. The peptide also influences immune responses, vascular function, metabolism, and gastrointestinal activity. Because PACAP expression changes in response to neuronal injury and cellular stress, it has become an important biomarker for investigations of neuroprotection, tissue repair, and adaptive signaling mechanisms.

Abnormal PACAP signaling has been associated with migraine, neurodegenerative disease, ischemic injury, psychiatric disorders, chronic pain, inflammation, metabolic dysfunction, and several cancers. PACAP antibodies are suitable for applications including Western blotting and related protein detection methods when validated for the specific application. NSJ Bioreagents provides carefully validated antibodies to support investigations of neuropeptide biology, neuronal signaling, neuroendocrine function, and disease-associated cellular pathways. A PACAP Antibody / Adenylate Cyclase Activating Polypeptide Antibody is a valuable research reagent for detecting PACAP expression and advancing studies of nervous system function and neuroprotective signaling.

Visit our ADCYAP1 Antibody / Pituitary Adenylate Cyclase Activating Polypeptide Antibody page to explore additional validated antibodies and research tools for investigating ADCYAP1 expression, PACAP signaling, neuropeptide biology, neuroendocrine regulation, and nervous system function.

Application Notes

Optimal dilution of the PACAP Antibody / Adenylate Cyclase Activating Polypeptide Antibody should be determined by the researcher.

Immunogen

Amino acids GKRYKQRVKNKGRR were used as the immunogen for this PACAP antibody.

Storage

Aliquot and store the PACAP antibody at -20oC.

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