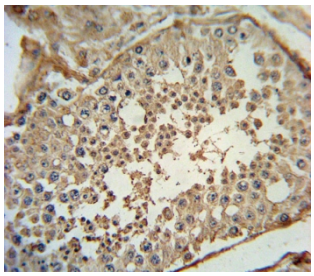
ADCYAP1 Antibody / Pituitary Adenylate Cyclase Activating Polypeptide Antibody (F54833)

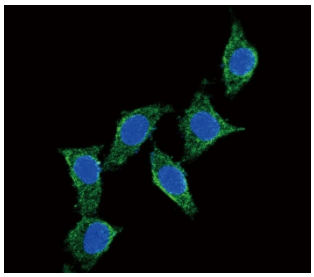
Catalog No.	Formulation	Size
F54833-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F54833-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

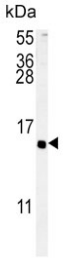
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
UniProt	P18509
Applications	Flow Cytometry : 1:10-1:50 per million cells Immunofluorescence : 1:10-1:50 Immunohistochemistry (FFPE) : 1:10-1:50 Western Blot : 1:500-1:1000
Limitations	This ADCYAP1 antibody is available for research use only.



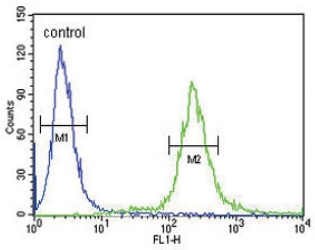
ADCYAP1 Antibody Human Testis IHC. Immunohistochemical staining of FFPE human testis tissue using ADCYAP1 antibody following heat-induced epitope retrieval in pH6 citrate buffer. Staining was visualized using an HRP secondary antibody with DAB chromogen. Moderate cytoplasmic staining is observed within seminiferous tubules, including spermatogenic cells, consistent with the reported expression of pituitary adenylate cyclase activating polypeptide in the human testis. This result demonstrates that the ADCYAP1 antibody is suitable for detecting endogenous ADCYAP1 in FFPE human reproductive tissue.



ADCYAP1 Antibody Human HEK293 Cell IF. Immunofluorescent staining of human HEK293 cells using ADCYAP1 antibody (green) with DAPI nuclear counterstain (blue). The antibody produces predominantly cytoplasmic staining with a finely granular distribution and minimal nuclear signal, consistent with the intracellular localization of pituitary adenylate cyclase activating polypeptide precursor. This result demonstrates that the ADCYAP1 antibody is suitable for detecting endogenous ADCYAP1 in cultured human cells by immunofluorescence.



ADCYAP1 Antibody Human HEK293 Cell WB. Western blot analysis of human HEK293 cell lysate using ADCYAP1 antibody. A distinct immunoreactive band is detected at approximately 15-16 kDa. Although the predicted molecular weight of the ADCYAP1 precursor is approximately 19 kDa, migration between approximately 15 and 25 kDa has been reported and may reflect precursor processing, post-translational modification, or differences in electrophoretic mobility. This result demonstrates that the ADCYAP1 antibody is suitable for detecting endogenous pituitary adenylate cyclase activating polypeptide precursor in human cell lysates.



ADCYAP1 Antibody Human HEK293 Cell FACS. Flow cytometric analysis of human HEK293 cells stained with ADCYAP1 antibody. The green histogram shows a clear rightward shift compared with the blue isotype control, demonstrating specific detection of endogenous ADCYAP1 expression. This result indicates that the ADCYAP1 antibody is suitable for flow cytometric analysis of pituitary adenylate cyclase activating polypeptide precursor in human cells.

Description

ADCYAP1 Antibody / Pituitary Adenylate Cyclase Activating Polypeptide Antibody recognizes ADCYAP1, the gene encoding pituitary adenylate cyclase activating polypeptide (PACAP), a highly conserved neuropeptide precursor that is proteolytically processed to generate the biologically active PACAP-38 and PACAP-27 peptides. ADCYAP1 is widely expressed throughout the central and peripheral nervous systems as well as in endocrine, gastrointestinal, and reproductive tissues. Through activation of PAC1, VPAC1, and VPAC2 receptors, PACAP regulates cyclic AMP signaling and numerous downstream cellular pathways. An ADCYAP1 Antibody is a valuable tool for investigating neuropeptide biology, neuronal communication, and neuroendocrine signaling.

Pituitary Adenylate Cyclase Activating Polypeptide functions as a multifunctional signaling molecule involved in neurotransmission, hormone secretion, neuronal differentiation, synaptic plasticity, circadian rhythm regulation, and cellular survival. The peptide also influences immune responses, vascular tone, metabolism, and gastrointestinal physiology. Because ADCYAP1 expression changes in response to neuronal injury and physiological stress, it has become an important target for studies of neuroprotection, tissue repair, and adaptive cellular signaling. The broad distribution and diverse biological activities of Pituitary Adenylate Cyclase Activating Polypeptide continue to drive interest across neuroscience and cell biology research.

Altered ADCYAP1 signaling has been associated with migraine, neurodegenerative disease, ischemic injury, psychiatric disorders, chronic pain, inflammation, metabolic dysfunction, and several cancers. Changes in PACAP expression have also been linked to stress-related disorders and abnormalities in autonomic regulation. Consequently, an ADCYAP1 Antibody is widely used to investigate disease-associated signaling pathways, characterize tissue-specific expression, and examine mechanisms underlying nervous system development and cellular homeostasis.

ADCYAP1 antibodies are suitable for applications including Western blotting, immunohistochemistry, immunofluorescence, flow cytometry, and related protein detection methods when validated for the specific application.

NSJ Bioreagents provides carefully validated antibodies to support investigations of neuropeptide signaling, neuronal development, neuroendocrine regulation, and disease biology. An ADCYAP1 Antibody / Pituitary Adenylate Cyclase Activating Polypeptide Antibody is a valuable research reagent for detecting ADCYAP1 expression and advancing studies of PACAP biology, neuronal signaling, and neuroprotective mechanisms.

Explore our Neuroscience Antibodies page to discover validated antibodies for ADCYAP1 and other proteins involved in neuropeptide signaling, neuronal development, synaptic communication, neuroendocrine regulation, and nervous system research.

Application Notes

The stated application concentrations are suggested starting points. Titration of the ADCYAP1 Antibody / Pituitary Adenylate Cyclase Activating Polypeptide Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 148-176 from the human protein was used as the immunogen for the ADCYAP1 antibody.

Storage

Aliquot the ADCYAP1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

ADCYAP1 antibody, Pituitary Adenylate Cyclase Activating Polypeptide antibody, PACAP antibody, PACAP38 precursor antibody, Adenylate Cyclase Activating Polypeptide antibody, Prepro-PACAP antibody

Copyright © NSJ Bioreagents. All rights reserved.