



Qty: 100 µg/200 µL

Mouse anti-PACAP

Catalog No. 39-6300

Lot No.

Mouse anti-PACAP

FORM

This monoclonal antibody is supplied as a 200 µL aliquot at a concentration of 0.5 mg/mL in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from mouse ascites by protein A chromatography.

CLONE: ZP006

ISOTYPE: Mouse IgG₁-kappa

IMMUNOGEN

Synthetic peptide derived from the C-terminal region of the human, mouse, and rat PACAP protein

SPECIFICITY

This antibody is specific for the PACAP (pituitary adenylate cyclase activating polypeptide precursor, ADCYAP1, adenylate cyclase activating polypeptide 1 (pituitary)) protein. On Western blots, it identifies the target band at ~18 kDa.

REACTIVITY

Reactivity has been confirmed with human IMR-32 cell lysates and rat brain homogenates. Based on amino acid sequence identity, reactivity with mouse is expected.

Sample	ELISA	Western Blotting
Human	ND	+++
Mouse	ND	ND
Rat	ND	+++
Immunogen	+++	N/A

(Excellent +++, Good++, Poor +, No reactivity 0, Not applicable N/A, Not Determined ND)
0* No reactivity observed under conditions tested.

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.1-1 µg/mL
Western Blotting: 1-3 µg/mL

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

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PI396300

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BACKGROUND

Pituitary adenylate cyclase activating polypeptide precursor (PACAP, ADCYAP1, adenylate cyclase activating polypeptide 1 (pituitary)), is a bioactive peptide that was originally isolated from ovine hypothalamus on the basis of its ability to stimulate adenylate cyclase in rat anterior pituitary cell cultures.¹ PACAP is a neurotransmitter and neuromodulator as well as a hypophysiotropic hormone, and it acts through three receptors: PAC1, vasoactive intestinal peptide (VIP), and VIP receptor.² In addition, it plays a role in paracrine and autocrine regulation of certain types of cells. PACAP, through PAC1, is a potent mediator of adult neural stem cell proliferation.²

The IMR-32 neuroblastoma cell line produces immunoreactive (ir) PACAP in both precursor and processed forms.³

REFERENCES

1. Hosoya M, et al. *Biochim Biophys Acta* 1129:199-206, 1992.
2. Mercer A, et al. *J Neurosci Res* 76:205-215, 2004.
3. Suzuki N, et al. *J Biochem* (Tokyo) 113(5):549-556, 1993.

RELATED PRODUCTS

Product	Conjugate	Cat. No.
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

Conjugate	ZyMAX™ Goat x Rabbit IgG (H+L)	ZyMAX™ Goat x Mouse IgG (H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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