

Product datasheet for **AM32828PU-S**

ACTH (POMC) (1-24) Mouse Monoclonal Antibody [Clone ID: AH26]

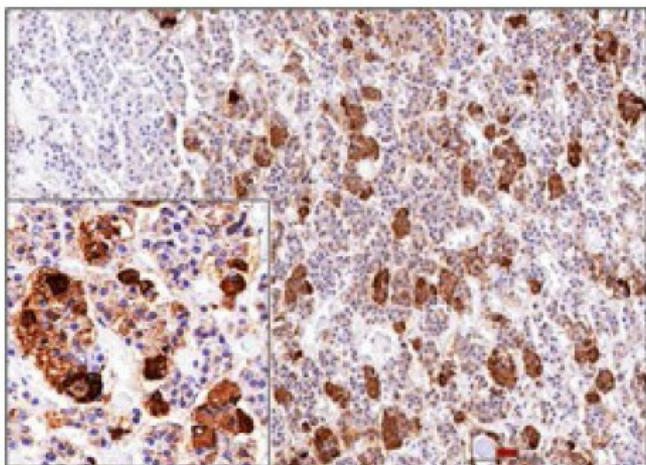
Product data:

Product Type:	Primary Antibodies
Clone Name:	AH26
Applications:	FC, IF, IHC, IP, WB
Recommended Dilution:	ELISA: Use Antibody without BSA for Coating. Western Blot: 0.5-1 µg/ml. Flow Cytometry: 0.5-1 µg/10 ⁶ cells. Immunofluorescence: 1-2 µg/ml. Immunoprecipitation: 1-2 µg/500 µg protein lysate. Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections: 0.5-1 µg/ml for 30 minutes at RT. No special pretreatment is required for staining of formalin-fixed, paraffin-embedded tissues. Recommended Positive Control: Normal pituitary gland or pituitary tumor.
Reactivity:	Broad, Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Synthetic peptide corresponding to amino acids 1-24 of Human ACTH.
Specificity:	The antibody recognizes an epitope on the N-terminus of ACTH. The antibody reacts with both ACTH and Synacthen. The antibody also reacts with the ACTH precursor molecule POMC. However, the antibody does not cross-react with CLIP. This monoclonal antibody is superb for staining routine formalin-fixed, paraffin-embedded tissues. The antibody labels corticotrophs in the adenohypophysis. The antibody is useful in the classification of pituitary adenomas. Likewise, the antibody can be used in the differential identification of primary and metastatic tumors of the pituitary. Cellular Localization: Cytoplasmic.



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Formulation:	10mM PBS State: Purified State: Liquid purified IgG fraction from Bioreactor Concentrate Stabilizer: 0.05% BSA Preservative: 0.05% Sodium Azide
Concentration:	lot specific
Purification:	Protein A/G Chromatography
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	5 kDa (ACTH), ~30 kDa (POMC precursor). The Molecular Weight of POMC may vary depending on isoform variation and post-translational modifications.
Gene Name:	proopiomelanocortin
Database Link:	Entrez Gene 5443 Human P01189
Background:	<p>ACTH (Adrenocorticotrophic hormone) is produced and secreted by the anterior pituitary gland, and is a key component of the hypothalamic-pituitary-adrenal axis. ACTH is synthesized from the precursor molecule pre-opiomelanocorin (POMC). POMC undergoes proteolytic cleavages and processing to generate not only ACTH but also a number of other small biologically active peptides including alpha-MSH and beta-endorphin, all in cell type specific manners. The production of ACTH is triggered by biological stress. ACTH, in turn, then stimulates the secretion of corticosteroids by the adrenal cortex. The half-life of ACTH in human blood is only about ten minutes. An excess of ACTH can cause Cushing's syndrome whereas ACTH deficiency can result in secondary adrenal insufficiency.</p> <p>ACTH consists of 39 amino acids (aa), and can be proteolytically cleaved into different active fragments including CLIP (corticotropin-like intermediate lobe peptide), consisting of aa 17-39, which stimulates insulin production. Synacthen is an active synthetic form of ACTH, corresponding to the first 24 aa, which is used to conduct ACTH stimulation tests.</p>
Synonyms:	Corticotropin, POMC, Adrenocorticotropic hormone

Product images:

Formalin-fixed, Paraffin-Embedded Human pituitary gland stained with ACTH Antibody (Clone AH26) at 1/2000 using peroxidase-conjugate and DAB chromogen. Note cytoplasmic staining.