

ACTH Monoclonal Mouse Antibody (AH26 + 57)



Product Description

ACTH (same as Corticotropin) is a 39 amino acid active peptide produced by the anterior pituitary. This MAb is specific to Synacthen (aa1-24 of ACTH); does not react with CLIP (aa17-39 of ACTH). POMC (pro-opiomelanocortin or corticotropin-lipotropin) is a 267 amino acid polypeptide hormone precursor that goes through extensive, tissue-specific posttranslational processing by convertases. POMC is cleaved into ten hormone chains named NPP, ACTH, alpha-MSH (Melanocyte Stimulating Hormone), beta-MSH, gamma-MSH, CLIP (corticotropin-like intermediary peptide), Lipotropin-beta, Lipotropin-gamma, beta-endorphin and Met-enkephalin. ACTH is also produced by cells of immune system (T-cells, B-cells, and macrophages) in response to stimuli associated with stress. Anti-ACTH is a useful marker in classification of pituitary tumors and the study of pituitary disease. It reacts with ACTH-producing cells (corticotrophs).It also may react with other tumors (e.g. some small cell carcinomas of the lung) causing paraneoplastic syndromes by secreting ACTH.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the <u>CF® Dye Brochure</u> for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <u>order@biotium.com</u> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1025, Anti-ACTH (AH26 57)

Call us : 800-304-5357 Email:

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Product attributes

Product attributes	
research-areas	Cancer, Endocrinology
Antibody number	#1025
Antibody reactivity (target)	ACTH
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	AH26 57
Isotype	lgG's
Molecular weight	ACTH is ~5 kDa, and the POMC precursor is ~30 kDa. The molecular weight of POMC depends upon isoform variation and post-translational modifications.
Synonyms	Pro-opiomelanocortin (POMC); Adrenocorticotropin; Adrenocorticotropic hormone; Melanocyte Stimulating Hormone (MSH); Melanotropin; beta-Endorphin; Lipotropin; Met-Enkephalin; POC
Human gene symbol	POMC
Entrez gene ID	5443
SwissProt	P01189
Unigene	1897
Immunogen	Synthetic peptide corresponding to aa1-24 of human ACTH (AH26); N-terminal fragment of human ACTH conjugated to KLH (57)
Verified antibody applications	IHC (FFPE) (verified)
Antibody target cellular localization	Secreted (extracellular), Vesicular
Species reactivity	Human, Mouse, Rat
Antibody application notes	Immunoprecipitation: 0.5-1 ug/500 ug protein lysate, Immunofluorescence: 0.5-1 ug/mL, Immunohistology (formalin), Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Western blotting 0.5-1.0 ug/mL, Predicted to show broad species reactivity. Optimal dilution for a specific application should be determined by user
Positive control	Normal pituitary gland or pituitary tumor
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 $^{\circ}$ C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 $^{\circ}$ C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer, Endocrinology
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.
Tumor expression	Pituitary cancer

Antibody # prefix Conjugation Ex/Em (nm) Laser line **Dye Features Detection channel** DAPI (microscopy) BNC04 CF®405S 404/431 405 CF®405S Features AF405 490/515 CF®488A BNC88 488 GFP, FITC CF®488A Features BNC68 562/583 532, 561 RFP, TRITC CF®568 CF®568 Features BNC94 CF®594 593/614 561 Texas Red® CF®594 Features BNC40 CF®640B 642/662 633-640 Cy®5 CF®640R Features CF®647 633-640 Cy®5 BNC47 650/665 CF®647 Features BNC74 CF®740 742/767 633-685 775/50 CF®740 Features BNCB Biotin N/A N/A N/A BNUB Purified N/A N/A N/A BNUM N/A N/A N/A Purified. **BSA-free**

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This datasheet was generated on April 20, 2025 at 09:13:15 AM. Visit product page to check for updated information before use. Product link: <u>http://54.245.69.9/product/monoclonal-anti-acth-adrenocorticotrophic-hormone-ah2657/</u>