

Mouse ACTH Monoclonal Antibody | anti-POMC antibody

ACTH

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA62629	Mouse	Human, Mouse, Rat	Immunohistochemistry, Immunofluorescence, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

ACTH; Monoclonal Antibody; Adrenocorticotropin; alpha or beta or gamma Melanocyte Stimulating Hormone (MSH) or Melanotropin; beta-Endorphin; beta or gamma Lipotropin (LPH); CLIP; Met Enkephalin; POC; POMC; anti-POMC antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	IgG1, kappa
Clone Number	SPM333
Specificity	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.
Form/Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Sequence Length	267
Applicable Applications for anti-POMC antibody	IHC (Immunohistochemistry), IF (Immunofluorescence), FCM/FACS (Flow Cytometry)
Cellular Localization	Secreted
Positive Control	Normal pituitary gland or pituitary tumor
Immunogen	Synthetic peptide corresponding to aa1-24 of human ACTH
Research Areas	Cytokine Signaling, Immunology, Infectious Disease, Neuroscience, Signal Transduction, Transcription Factors
Preparation and Storage	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months.

IMAGES



IHC (Immunohistochemistry)
Formalin-fixed, paraffin-embedded Human Pituitary stained with ACTH Monoclonal Antibody (SPM333).

ADDITIONAL INFORMATION

Product Categories/Family for anti-POMC antibody	CB- Cell Biology; CA- Cancer
References	1. Hsu DW et. al. American Journal of Pathology, 1991, 138(4):897-909.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4505949
NCBI GeneID	5443
NCBI Accession #	NP_000930.1
NCBI GenBank Nucleotide #	NM_000939.2
UniProt Accession #	P01189; P78442; Q53T23; Q9UD39; Q9UD40
Molecular Weight	ACTH is ~5kDa, and the POMC precursor is ~30kDa. The molecular weight of POMC depends upon isoform variation and post-translational modifications.
NCBI Official Full Name	pro-opiomelanocortin preproprotein
NCBI Official Synonym Full Names	proopiomelanocortin
NCBI Official Symbol	POMC
NCBI Official Synonym Symbols	LPH; MSH; NPP; POC; ACTH; CLIP
NCBI Protein Information	pro-opiomelanocortin; beta-LPH; beta-MSH; alpha-MSH; gamma-LPH; gamma-MSH; beta-endorphin; met-enkephalin; lipotropin beta; lipotropin gamma; melanotropin beta; melanotropin alpha; melanotropin gamma; pro-ACTH-endorphin; adrenocorticotropin; corticotropin-lipotropin; adrenocorticotropic hormone; opiomelanocortin prepropeptide; proopiomelanocortin preproprotein; beta-melanocyte-stimulating hormone; alpha-melanocyte-stimulating hormone; corticotropin-like intermediary peptide
UniProt Protein Name	Pro-opiomelanocortin
UniProt Gene Name	POMC
UniProt Synonym Gene Names	POMC; ACTH; CLIP
UniProt Entry Name	COLI_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/monoclonal/acth-antibody-clone-spm333-immunohistochemistry-immunofluorescence-flow-cytometry-elisa/62629>