

# ACTH (Adrenocorticotrophic Hormone) (Pituitary Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone SPM333 ]

Catalog # AH10672

## Product Information

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<b>Application</b>	IF, FC, IHC-P
<b>Primary Accession</b>	<a href="#">P01189</a>
<b>Other Accession</b>	<a href="#">5443</a> , <a href="#">1897</a>
<b>Reactivity</b>	Human, Mouse, Rat
<b>Host</b>	Mouse
<b>Clonality</b>	Monoclonal
<b>Isotype</b>	Mouse / IgG1, kappa
<b>Clone Names</b>	SPM333
<b>Calculated MW</b>	29424

## Additional Information

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<b>Gene ID</b>	5443
<b>Other Names</b>	Pro-opiomelanocortin, POMC, Corticotropin-lipotropin, NPP, Melanotropin gamma, Gamma-MSH, Potential peptide, Corticotropin, Adrenocorticotrophic hormone, ACTH, Melanotropin alpha, Alpha-MSH, Corticotropin-like intermediary peptide, CLIP, Lipotropin beta, Beta-LPH, Lipotropin gamma, Gamma-LPH, Melanotropin beta, Beta-MSH, Beta-endorphin, Met-enkephalin, POMC
<b>Application Note</b>	IF~~1:50~200 FC~~1:10~50 IHC-P~~N/A
<b>Format</b>	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.
<b>Storage</b>	Store at 2 to 8°C. Antibody is stable for 24 months.
<b>Precautions</b>	ACTH (Adrenocorticotrophic Hormone) (Pituitary Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	POMC ( <a href="#">HGNC:9201</a> )
<b>Function</b>	Precursor protein of pituitary hormones that are involved in diverse physiological processes, including the regulation of energy balance, stress response, immune function and skin pigmentation. [Met-enkephalin]:

Endogenous opiate.

<b>Cellular Location</b>	Secreted {ECO:0000250   UniProtKB:P01193}. Note=Melanocyte-stimulating hormone alpha and beta-endorphin are stored in separate granules in hypothalamic POMC neurons, suggesting that secretion may be under the control of different regulatory mechanisms {ECO:0000250   UniProtKB:P01193}
<b>Tissue Location</b>	ACTH and MSH are produced by the pituitary gland.

## Background

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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.  

## References

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Hsu DW et. al. American Journal of Pathology, 1991, 138(4):897-909

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.