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

Mouse Monoclonal Antibody [Clone SPM333]

Catalog # AH10672

Specification

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

Application	**IHC-P, IF, FC**
Primary Accession	P01189
Other Accession	5443, 1897
Reactivity	**Human, Mouse, Rat**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse / IgG1, kappa**
Calculated MW	**ACTH is ~5kDa, and the POMC precursor is ~30kDa. The molecular weight of POMC depends upon isoform variation and post-translational modifications. KDa**

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

Gene ID 5443

Other Names
Pro-opiomelanocortin, POMC, Corticotropin-lipotropin, NPP, Melanotropin gamma, Gamma-MSH, Potential peptide, Corticotropin, Adrenocorticotropic 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

Application Note
IHC-P~~N/A<br \>IF~~1:50~200<br \>FC~~1:10~50

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.

Storage
Store at 2 to 8°C.Antibody is stable for 24 months.

Precautions
ACTH (Adrenocorticotrophic Hormone) (Pituitary Marker) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

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

Name POMC

Function
[Corticotropin]: Stimulates the adrenal glands to release cortisol. [Melanocyte-stimulating hormone beta]: Increases the pigmentation of skin by increasing melanin production in melanocytes. [Met-enkephalin]: Endogenous opiate.

Cellular Location
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}

Tissue Location
ACTH and MSH are produced by the pituitary gland.

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

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

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

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

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).ĀIt also may react with other tumors (e.g. some small cell carcinomas of the lung) causing paraneoplastic syndromes by secreting ACTH. ĀĀ

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

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