

Anti-ACTH (N-Terminal) Antibody

Recombinant Mouse Monoclonal Antibody Catalog # AH13438

Specification

Anti-ACTH (N-Terminal) Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IHC-P, IF, FC, E <u>P01189</u> <u>1897</u> Human, Mouse, Rat Mouse Monoclonal Mouse / IgG1, kappa 29424

Anti-ACTH (N-Terminal) Antibody - Additional Information

Gene ID 5443

Other Names Adrenocorticotropin; alpha or beta or gamma Melanocyte Stimulating Hormone (MSH) or Melanotropin; beta-Endorphin; beta or gamma Lipotropin (LPH); CLIP; Met Enkephalin; POC; POMC

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

Format

200ug/ml of recombinant MAb purified 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 Anti-ACTH (N-Terminal) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Anti-ACTH (N-Terminal) Antibody - 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

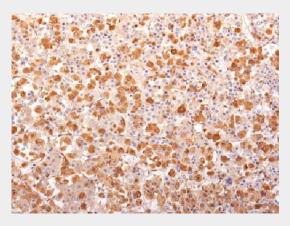
ACTH and MSH are produced by the pituitary gland.

Anti-ACTH (N-Terminal) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-ACTH (N-Terminal) Antibody - Images



Formalin-fixed, paraffin-embedded human Pituitary Gland stained with ACTH Recombinant Mouse Monoclonal Antibody (r57).

Anti-ACTH (N-Terminal) Antibody - 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). It also may react with other tumors (e.g. some small cell carcinomas of the lung) causing paraneoplastic syndromes by secreting ACTH.