

# Anti-ACTH (C-Terminus) Antibody

Mouse Monoclonal Antibody Catalog # AH13444

### **Product Information**

**Application** IF, FC, E **Primary Accession** P01189 Other Accession 1897 Reactivity Human Host Mouse Clonality Monoclonal Isotype Mouse / IgG1 **Clone Names** CLIP/1418 Calculated MW 29424

## **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** ELISA (For coating, order Ab without BSA);,Flow Cytometry (0.5-1ug/million

cells in 0.1ml); ,Immunofluorescence (1-2ug/ml),Optimal dilution for a specific

application should be determined.

**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** Anti-ACTH (C-Terminus) Antibody is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **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.

# **Background**

ACTH (same as Corticotropin) is a 39 amino acid active peptide produced by the anterior pituitary. This MAb is specific to CLIP (aa25-39 of ACTH); does not react with Synacthen (aa1-24 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.

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