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**Product Name: ACTH Mouse Monoclonal Antibody****Catalog #: AMM82576**

For research use only.

**Summary**

|                      |   |
|----------------------|---|
| <b>Description</b>   | Mouse monoclonal Antibody   |
| <b>Host</b>          | Mouse   |
| <b>Application</b>   | IHC,ELISA,FC  |
| <b>Reactivity</b>    | Human   |
| <b>Conjugation</b>   | Unconjugated  |
| <b>Modification</b>  | Unmodified  |
| <b>Isotype</b>       | Mouse IgG1  |
| <b>Clonality</b>     | Monoclonal  |
| <b>Form</b>          | Liquid  |
| <b>Concentration</b> | 1mg/ml  |
| <b>Storage</b>       | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>      | Ice bags  |
| <b>Buffer</b>        | Purified antibody in PBS with 0.05% sodium azide                            |
| <b>Purification</b>  | Affinity Purification   |

**Application**

|                         |  |
|-------------------------|--|
| <b>Dilution Ratio</b>   | IHC 1:200-1:1000,ELISA 1:5000-1:20000,FC 1:200-1:400 |
| <b>Molecular Weight</b> | 29.4kDa  |

**Antigen Information**

|                          |   |
|--------------------------|---|
| <b>Gene Name</b>         | ACTH  |
| <b>Alternative Names</b> | POMC; LPH; MSH; NPP; POC; CLIP; OBAIRH                            |
| <b>Gene ID</b>           | 5443.0  |
| <b>SwissProt ID</b>      | P01189  |
| <b>Immunogen</b>         | Purified recombinant fragment of human ACTH expressed in E. Coli. |

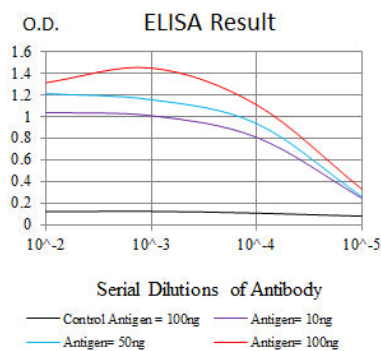
**Background**

This gene encodes a preproprotein that undergoes extensive, tissue-specific, post-translational processing via cleavage by subtilisin-like enzymes known as prohormone convertases. There are eight potential cleavage sites within the preproprotein and, depending on tissue type and the available convertases, processing may yield as many as ten biologically active peptides

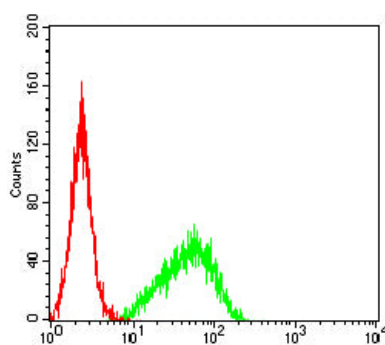
involved in diverse cellular functions. The encoded protein is synthesized mainly in corticotroph cells of the anterior pituitary where four cleavage sites are used; adrenocorticotrophin, essential for normal steroidogenesis and the maintenance of normal adrenal weight, and lipotropin beta are the major end products. In other tissues, including the hypothalamus, placenta, and epithelium, all cleavage sites may be used, giving rise to peptides with roles in pain and energy homeostasis, melanocyte stimulation, and immune modulation. These include several distinct melanotropins, lipotropins, and endorphins that are contained within the adrenocorticotrophin and beta-lipotropin peptides. The antimicrobial melanotropin alpha peptide exhibits antibacterial and antifungal activity. Mutations in this gene have been associated with early onset obesity, adrenal insufficiency, and red hair pigmentation. Alternatively spliced transcript variants encoding the same protein have been described.

## Research Area

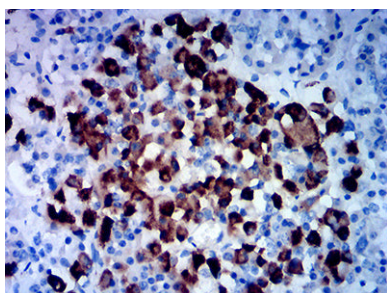
### Image Data



Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



Flow cytometric analysis of K562 cells using ACTH mouse mAb (green) and negative control (red).



Immunohistochemical analysis of paraffin-embedded human hypophysis tissues using ACTH mouse mAb with DAB staining.

