

Mouse Anti-ACTH antibody

SLM-34147M

Product Name ACTH

Chinese Name 促肾上腺皮质激素单克隆抗体

Alias Adrenocorticotrophic hormone; Adrenocorticotropin; Adrenocorticotropin Hormone; Alpha Melanocyte Stimulating Hormone; Beta Lipotropin; Beta Melanocyte Stimulating Hormone; CLIP; Corticotropin; Corticotropin Like Intermediary Peptide; Corticotropin lipotropin precursor; Lipotropin Beta; Lipotropin Gamma; LPH; Melanotropin Alpha; Met Enkephalin; MSH; NPP; POC; POMC; Pro opiomelanocortin; Proopiomelanocortin; COLI_HUMAN.

Research Area Growth factors and hormones

Immunogen Species Mouse

Clonality Monoclonal

Clone NO. 7D13

React Species Human

Applications IHC-P=1:100-500, IHC-F=1:100-500, IF=1:50-200
optimal dilutions/concentrations should be determined by the end user.

Cellular localization Secretory protein

Form Lyophilized or Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human ACTH

Lsotype IgG1,Kappa

Purification affinity purified by Protein A

Buffer Solution Liquid in PBS containing 50% glycerol, 0.5% BSA and 2% sodium azide.

Storage Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.

Attention This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed [PubMed](#)

This gene encodes a polypeptide hormone precursor 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 polypeptide precursor 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. 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. [provided by RefSeq, Jul 2008].

Function:

ACTH stimulates the adrenal glands to release cortisol. MSH (melanocyte-stimulating hormone) increases the pigmentation of skin by increasing melanin production in melanocytes. Beta-endorphin and Met-enkephalin are endogenous opiates.

**Product
Detail**

Subunit:

Belongs to the POMC family.

Subcellular Location:

Secreted.

Tissue Specificity:

ACTH and MSH are produced by the pituitary gland.

Post-translational modifications:

Specific enzymatic cleavages at paired basic residues yield the different active peptides. O-glycosylated; reducing sugar is probably N-acetylgalactosamine.

DISEASE:

Defects in POMC may be associated with susceptibility to obesity (OBESITY) [MIM:601665]. It is a condition characterized by an increase of body weight beyond the limitation of skeletal and physical requirements, as the result of excessive accumulation of body fat. Defects in POMC are the cause of pro-opiomelanocortin deficiency (POMCD) [MIM:609734]. Affected individuals present early-onset obesity, adrenal insufficiency and red hair.

Similarity:

Belongs to the POMC family.



SWISS:
P01189

Gene ID:
5443

Database links:

[Entrez Gene: 5443](#) Human

[Entrez Gene: 18976](#) Mouse

[Entrez Gene: 24664](#) Rat

[Omim: 176830](#) Human

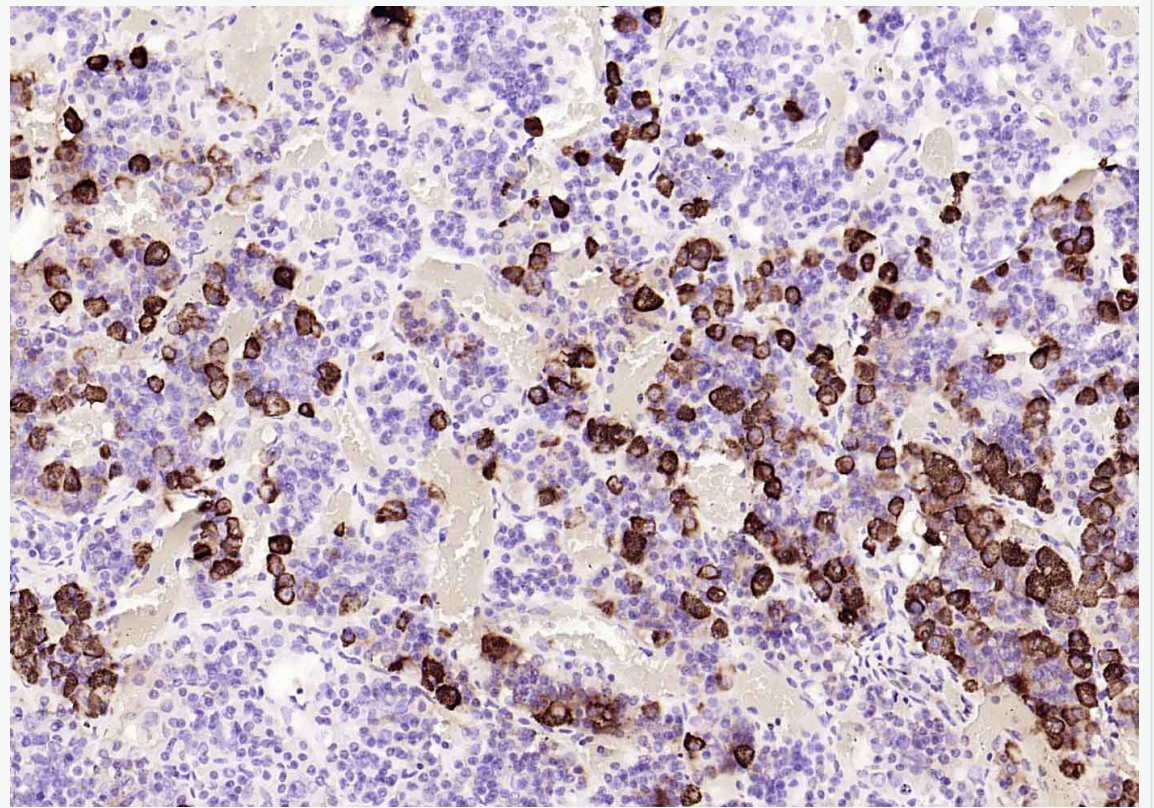
[SwissProt: P01190](#) Cow

[SwissProt: P01189](#) Human

[SwissProt: P01193](#) Mouse

[SwissProt: P01194](#) Rat

**Product
Picture**



Paraformaldehyde-fixed, paraffin embedded (Human pituitary adenoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Incubation with (ACTH) Monoclonal Antibody, Unconjugated (SLM-34147M) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Mouse)(sp-0024) instructions and DAB staining.