SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-ACTH (1-39)/AP Conjugated antibody

SL0443R-AP

Product Name	Anti-ACTH (1-39)/AP
Chinese Name	碱性磷酸酶（AP）标记的促肾上腺皮质激素(1-39)抗体
Alias	Adrenocorticotropic 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	Tumour Neurobiology Signal transduction Growth factors and hormones Endocrinopathy
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Rat(predicted:Mouse,Cow,Goat)
Applications	IHC-P=1:100-500,IHC-F=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	4.5kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human ACTH(1-39)
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:**

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.

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-opiomelanocortinin deficiency (POMCD) [MIM:609734]. Affected individuals present early-onset obesity, adrenal insufficiency and red hair.

Similarity:
Belongs to the POMC family.

Database links:

Entrez Gene: 5443 Human

Entrez Gene: 18976 Mouse

Entrez Gene: 24664 Rat

Omim: 176830 Human

SwissProt: P01189 Human

SwissProt: P01193 Mouse

SwissProt: P01194 Rat

Unigene: 1897 Human

Unigene: 277996 Mouse

Unigene: 108195 Rat

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

促肾上腺皮质激素(Adrenorticotrophin hormons, ACTH)是垂体前叶细胞分泌的一种多肽激素，是肾上腺皮质活性的主要调节者。
此抗体可与人的 ACTH 反应,与多种其它哺乳动物的 ACTH 有 React Species，可用于垂体腺瘤的功能性分类，有助于区分原发性和转移型垂体 Tumour，嗜络细胞瘤等部分神经内分泌 Tumour 也可出现阳性反应.