



Adrenocorticotropin(ACTH) Monoclonal Antibody

Catalog No	YP-mAb-10847
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	POMC
Immunogen	Synthesized peptide derived from human Adrenocorticotropin(ACTH)
Specificity	This antibody detects endogenous levels of human Adrenocorticotropin(ACTH)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Adrenocorticotropin;POMC;Adrenocorticotropin(ACTH);Pro-opiomelanocortin (POMC;Corticotropin-lipotropin) [Cleaved into: NPP;Melanotropin gamma (Gamma-MSH);Potential peptide;Corticotropin (Adrenocorticotropic hormone; ACTH);Melanotropin alpha (Alpha-MSH);Corticotropin-like intermediary peptide (CLIP);Lipotropin beta (Beta-LPH);Lipotropin gamma (Gamma-LPH); Melanotropin beta (Beta-MSH);Beta-endorphin;Met-enkephalin]
Observed Band	29kD
Calculated Molecular Weight	29kD
Cell Pathway	Secreted . 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. .
Tissue Specificity	ACTH and MSH are produced by the pituitary gland.
Function	disease:Defects in POMC are the cause of pro-opiomelanocortinin deficiency [MIM:609734]. Affected individuals present early-onset obesity, adrenal insufficiency and red hair.,disease:Defects in POMC may be associated with susceptibility to obesity [MIM:601665].,function:ACTH stimulates the adrenal glands to release cortisol.,function:Beta-endorphin and Met-enkephalin are endogenous opiates.,function:MSH (melanocyte-stimulating hormone) increases



the pigmentation of skin by increasing melanin production in melanocytes.,online information:Melanocyte-stimulating hormone entry,PTM:O-glycosylated; reducing sugar is probably N-acetylgalactosamine.,PTM:Specific enzymatic cleavages at paired basic residues yield the different active peptides., similarity:Belongs to the POMC family.,tissue specificity:ACTH and MSH are produced by the pituitary gland.,

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. The

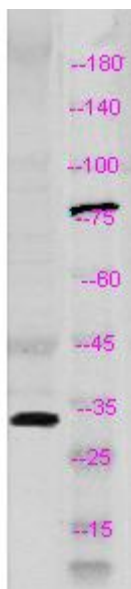
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using Adrenocorticotropin(ACTH) Monoclonal Antibody