



Adrenocorticotropin(ACTH) (ABT181R) Rabbit mAb (Ready to Use)

Catalog No	YP-rAb-18168
Isotype	IgG
Reactivity	Human
Applications	IHC
Gene Name	POMC
Protein Name	Pro-opiomelanocortin (POMC) (Corticotropin-lipotropin) [Cleaved into: NPP; Melanotropin gamma (Gamma-MSH); Potential peptide; Corticotropin (Adrenocorticotrophic 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]
Purification Process	Protein A
Specificity	This antibody detects endogenous levels of Adrenocorticotropin
Formulation	The prediluted ready-to-use antibody is diluted in phosphate buffer saline containing stabilizing protein and 0.05% Proclin 300
Source	Monoclonal, Rabbit,IgG
Dilution	Ready to use for IHC Note: For IHC, we suggest antigen retrieval with TE buffer pH 9.0
Concentration	0.5 mg/ml
Purity	≥90%
Storage Stability	2° C to 8° C/1 year,Ship by ice bag
Synonyms	ACTH ; Adrenocorticotrophic hormone ; Adrenocorticotropin ; alpha melanocyte stimulating hormone ; Alpha MSH ; Alpha-MSH ; beta endorphin ; Beta LPH ; beta melanocyte stimulating hormone ; Beta MSH ; Beta-LPH ; Beta-MSH ; CLIP ; Gamma MSH ; Gamma-LPH ; Gamma-MSH ; Lipotropin beta ; Lipotropin gamma ; LPH ; Melanotropin alpha ; Melanotropin ; Melanotropin beta ; Melanotropin gamma ; met enkephalin ; MSH ; NPP ; POC ; POMC ; pro ACTH endorphin ; Proopiomelanocortin ; Proopiomelanocortin preproprotein
Observed Band	
Calculated Molecular Weight	
Cell Pathway	Cytoplasmic





Tissue Specificity

ACTH and MSH are produced by the pituitary gland.

Function

Disease:Defects in POMC are the cause of pro-opiomelanocortin 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.

