10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Phospho-ACTH(S168) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3738a

Product Information

Application	DB, E
Primary Accession	P01189
Other Accession	NP_000930
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB16586
Calculated MW	29424

Additional Information

Gene ID	5443
Other Names	Pro-opiomelanocortin, POMC, Corticotropin-lipotropin, 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, POMC
Target/Specificity	This ACTH Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S168 of human ACTH.
Dilution	DB~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Phospho-ACTH(S168) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	POMC (HGNC:9201)

Function	Precursor protein of pituitary hormones that are involved in diverse physiological processes, including the regulation of energy balance, stress response, immune function and skin pigmentation. [Met-enkephalin]: Endogenous opiate.
Cellular Location	Secreted {ECO:0000250|UniProtKB:P01193}. Note=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 {ECO:0000250|UniProtKB:P01193}
Tissue Location	ACTH and MSH are produced by the pituitary gland.

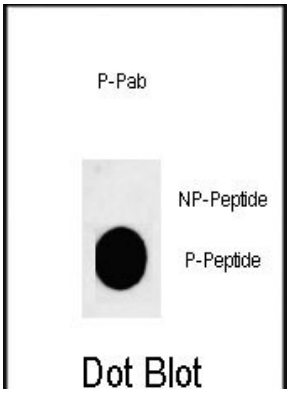
Background

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].

References

Canzian, F., et al. Hum. Mol. Genet. 19(19):3873-3884(2010)
Hoftberger, R., et al. Endocrinology 151(10):4801-4810(2010)
Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010)
Mastrofrancesco, A., et al. J. Immunol. 185(3):1903-1911(2010)
Ruano, G., et al. Pharmacogenomics 11(7):959-971(2010)

Images



Dot blot analysis of anti-Phospho-ACTH-pS168 Phospho-specific Pab (Cat. #AP3738a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.