

## Product datasheet for **TA367742**

### ACTH (POMC) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 200-1000 WB positive control: Mouse brain tissue lysate IHC: 20-100 Positive control: Human breast cancer Predicted cell location: Secreted
Reactivity:	Human, Mouse
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide of human POMC
Formulation:	pH7.4 PBS, 0.05% NaN <sub>3</sub> , 40% Glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C.
Stability:	1 year
Predicted Protein Size:	29 kDa
Gene Name:	proopiomelanocortin
Database Link:	<a href="#">Entrez Gene 5443 Human P01189</a>



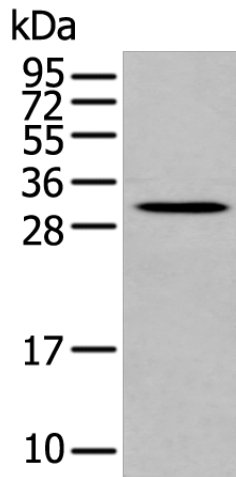
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**Background:**

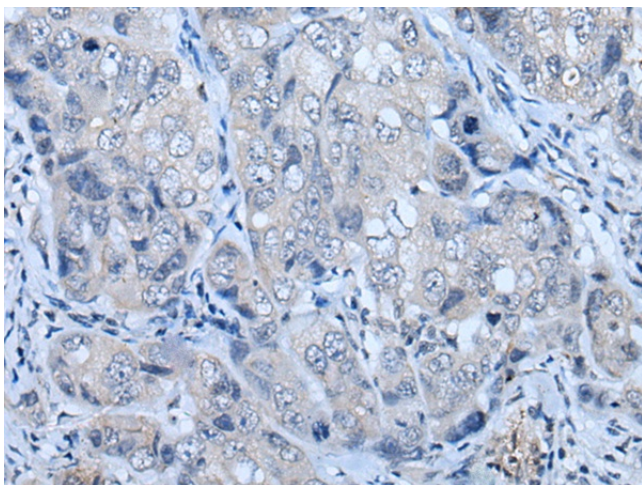
This gene encodes a polypeptide hormone precursor that undergoes extensive, tissue-specific, post-translational processing via cleavage by subtilisin-like enzymes known as prohormone convertases. There are eight potential cleavage sites within the polypeptide precursor and, depending on tissue type and 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. The antimicrobial melanotropin alpha peptide exhibits antibacterial and antifungal activity. 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.

**Synonyms:**

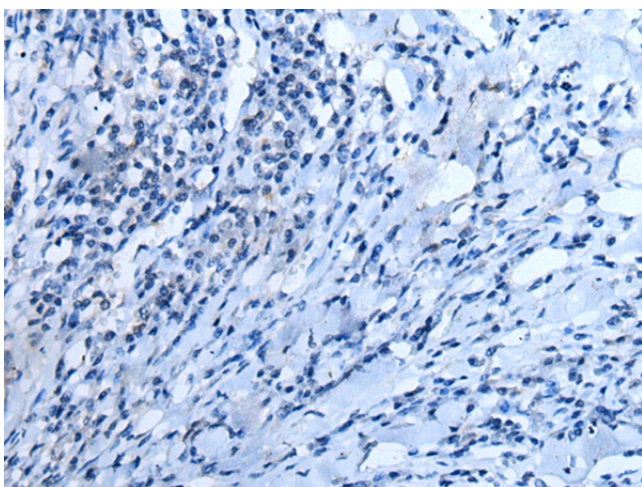
ACTH; adrenocorticotropin; alpha-MSH; beta-endorphin; beta-LPH; beta-MSH; CLIP; Corticotropin-lipotropin; gamma-LPH; gamma-MSH; LPH; met-enkephalin; MSH; NPP; OTTHUMP00000119991; OTTHUMP00000200964; POC; pro-ACTH-endorphin; proopiomelanocortin

**Product images:**

Gel: 12%SDS-PAGE  
Lysate: 40 µg  
Lane: Mouse brain tissue lysate  
Primary antibody: TA367742 (POMC Antibody) at dilution 1/200  
Secondary antibody: Goat anti rabbit IgG at 1/8000 dilution  
Exposure time: 30 seconds



Immunohistochemistry of paraffin-embedded Human breast cancer tissue using TA367742 (POMC Antibody) at dilution 1/20 (Original magnification: ×200)



Immunohistochemistry of paraffin-embedded Human breast cancer tissue using TA367742 (POMC Antibody) at dilution 1/20, treated with synthetic peptide. (Original magnification: ×200)