

Product datasheet for **TA506611**

ACTH (POMC) Mouse Monoclonal Antibody [Clone ID: OT11F3]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OT11F3
Applications:	IHC, WB
Recommend Dilution:	WB 1:400~4000, IHC 1:150
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human POMC(NP_001030333) produced in HEK293T cell.
Formulation:	PBS (PH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	1 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Gene Name:	proopiomelanocortin
Database Link:	NP_001030333 Entrez Gene 5443 Human



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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. 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]

Synonyms:

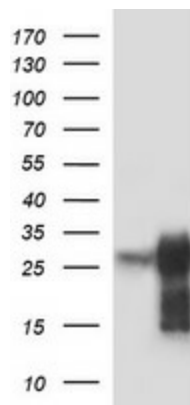
ACTH; CLIP; LPH; MSH; NPP; POC

Protein Families:

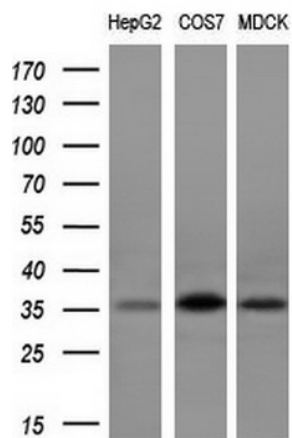
Druggable Genome

Protein Pathways:

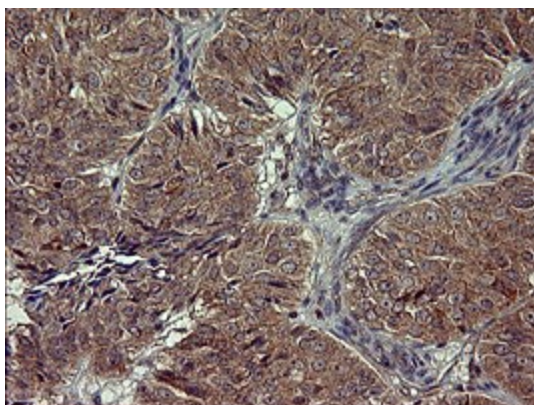
Adipocytokine signaling pathway, Melanogenesis

Product images:

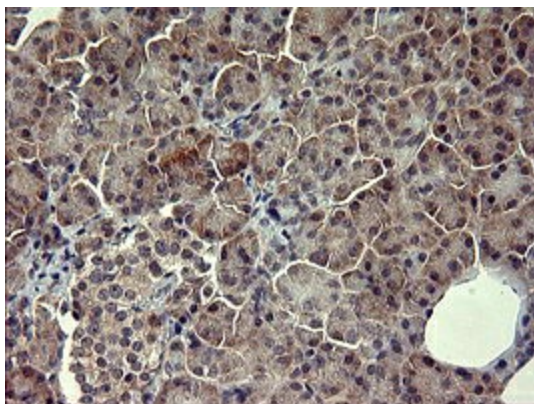
HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY POMC ([RC215351], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-POMC. Positive lysates [LY422129] (100ug) and [LC422129] (20ug) can be purchased separately from OriGene.



Western blot analysis of extracts (10ug) from 3 different cell lines by using anti-POMC monoclonal antibody (1:200).



Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-POMC mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA506611)



Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-POMC mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 120°C for 3min, TA506611)