

POMC Rabbit mAb**Catalog No.: A30010**

Recombinant

Basic Information**Observed MW**

16 kDa/35 kDa

Calculated MW

29 kDa

Category

Monoclonal Antibodies

Applications

WB, IF-F, IHC-P, ELISA

Cross Reactivity

Human, Mouse, Rat

Clone No.

ARC4044

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. 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.

Recommended Dilutions**WB** 1:10000 - 1:50000**IF-F** 1:1000 - 1:5000**IHC-P** 1:8000 - 1:30000**ELISA**

Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥1:10000), a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information**Gene ID**

5443

Swiss-Prot

P01189

Immunogen

This information is considered to be commercially sensitive.

Synonyms

LPH; MSH; NPP; POC; ACTH; CLIP; OBAIRH; POMC

Contact

☎ | 400-999-6126

✉ | cn.market@abclonal.com.cn🌐 | www.abclonal.com.cn**Product Information****Source**

Rabbit

Isotype

IgG

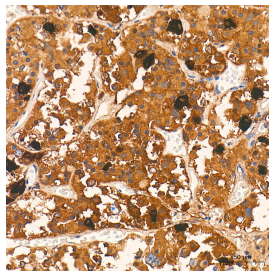
Purity

Affinity purification

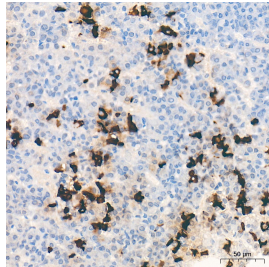
Storage

Store at -20°C

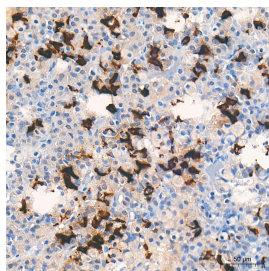
Validation Data



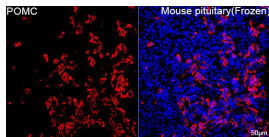
Immunohistochemistry analysis of paraffin-embedded Human pituitary tissue using POMC Rabbit mAb (A30010) at a dilution of 1:8000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



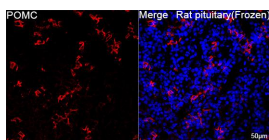
Immunohistochemistry analysis of paraffin-embedded Mouse pituitary tissue using POMC Rabbit mAb (A30010) at a dilution of 1:8000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



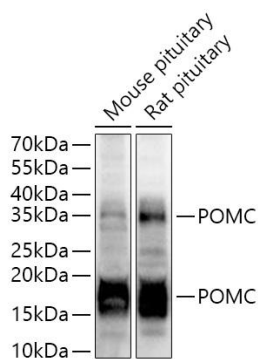
Immunohistochemistry analysis of paraffin-embedded Rat pituitary gland tissue using POMC Rabbit mAb (A30010) at a dilution of 1:8000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Confocal imaging of paraffin-embedded Mouse pituitary tissue using POMC Rabbit mAb (A30010, dilution 1:1000) followed by a further incubation with Cy3-conjugated Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



Confocal imaging of frozen sections of Rat pituitary tissue using POMC Rabbit mAb (A30010, dilution 1:1000) followed by a further incubation with Cy3-conjugated Goat Anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



Western blot analysis of various lysates using POMC Rabbit mAb (A30010) at 1:20000 dilution incubated overnight at 4°C.

Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.

Lysates/proteins: 25 µg per lane.

Blocking buffer: 3% nonfat dry milk in TBST.

Detection: ECL Basic Kit (RM00020).

Exposure time: 1 s.