ARG63767
anti-POMC / Proopiomelanocortin antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes POMC / Proopiomelanocortin
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, IHC-P, WB
Specificity	Both transcript variants encode the same protein. In Western blot, this product appears to react with the full length precursor protein only.
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	POMC / Proopiomelanocortin
Species	Human
Immunogen	C-NAIIKNAYKKGE
Conjugation	Un-conjugated
Alternate Names	Alpha-MSH; Beta-MSH; CLIP; Gamma-MSH; LPH; Corticotropin-lipotropin; NPP; ACTH; POMC; Gamma-LPH; Adrenocorticotropic hormone; MSH; Beta-LPH; Pro-opiomelanocortin; POC

Application Instructions

Application table

Application	Dilution
FACS	10 µg/ml
IHC-P	2 - 4 µg/ml
WB	0.3 - 2 µg/ml

Application Note

WB: Recommend incubate at RT for 1h.
IHC-P: Antigen Retrieval: Steam tissue section in Tris/EDTA buffer (pH 9.0).
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

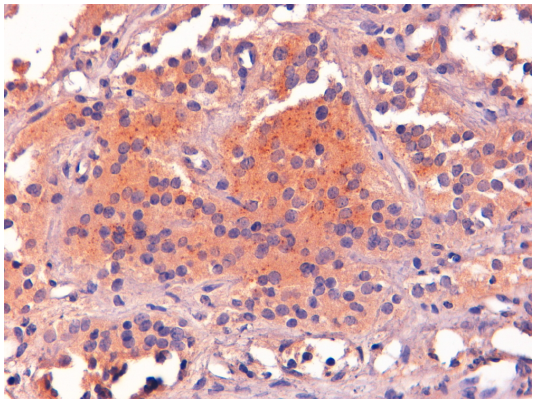
Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml

Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

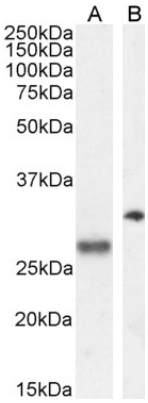
Database links	GeneID: 18976 Mouse GeneID: 5443 Human Swiss-port # P01189 Human Swiss-port # P01193 Mouse
Background	This gene encodes a polypeptide hormone precursor that undergoes extensive, tissue-specific, post-translational processing via cleavage by subtilisin-like enzymes known as prohormone convertases. 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]
Highlight	Related news: Studying obesity and appetite control by quantifying orexigenic and anorexigenic hormones;
Research Area	Cancer antibody; Metabolism antibody; Neuroscience antibody; Signaling Transduction antibody
Calculated Mw	29 kDa
PTM	Specific enzymatic cleavages at paired basic residues yield the different active peptides. O-glycosylated; reducing sugar is probably N-acetylgalactosamine.

Images



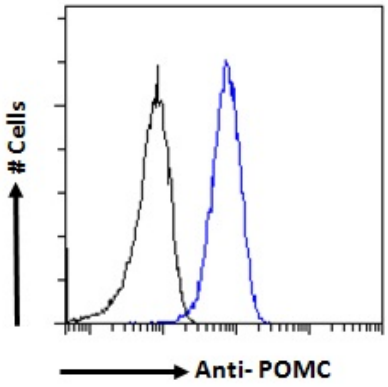
ARG63767 anti-POMC / Proopiomelanocortin antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human pituitary gland tissue. Antigen Retrieval: Steam tissue section in Tris/EDTA buffer (pH 9.0). The tissue section was stained with ARG63767 anti-POMC / Proopiomelanocortin antibody at 2 µg/ml dilution followed by HRP-staining.



ARG63767 anti-POMC / Proopiomelanocortin antibody WB image

Western blot: 35 µg of NIH/3T3 (A) and Rat brain (B) lysates (in RIPA buffer) stained with ARG63767 anti-POMC / Proopiomelanocortin antibody at 0.3 µg/ml (A) and 2 µg/ml (B) dilutions and incubated at RT for 1 hour.



ARG63767 anti-POMC / Proopiomelanocortin antibody FACS image

Flow Cytometry: Paraformaldehyde-fixed A431 cells permeabilized with 0.5% Triton. Cells were stained with ARG63767 anti-POMC / Proopiomelanocortin antibody (blue line) at 10 µg/ml dilution for 1 hour, followed by incubation with Alexa FluorR 488 labelled secondary antibody. IgG control: Unimmunized goat IgG (black line).