

## ARG62675 anti-beta Endorphin antibody [B31.15]

Package: 100 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [B31.15] recognizes beta Endorphin
Tested Reactivity	Hu
Tested Application	IHC-Fr, IHC-P
Specificity	The clone B31.15 reacts with human beta Endorphin, an endogenous opiate derived from ACTH gene. ACTH (Corticotropin; human 39 aa) is synthesized by the anterior pituitary gland and stimulates the adrenal cortex; 6 hormones are derived from one ACTH gene: ACTH, lipotropin, alpha-MSH, beta-MSH, endorphin, and one other.
Host	Mouse
Clonality	Monoclonal
Clone	B31.15
Isotype	IgG1
Target Name	beta Endorphin
Species	Human
Immunogen	Human beta Endorphin (full length native protein).
Conjugation	Un-conjugated
Alternate Names	Alpha-MSH; Beta-MSH; CLIP; Gamma-MSH; LPH; Corticotropin-lipotropin; NPP; ACTH; POMC; Gamma-LPH; Adrenocorticotrophic hormone; MSH; Beta-LPH; Pro-opiomelanocortin; POC

### Application Instructions

Application table	Application	Dilution
	IHC-Fr	Assay-dependent
	IHC-P	10 µg/ml
Application Note	IHC-P: Pretreatment: Heat retrieval (microwave oven). Staining technique: Standard ABC technique (DAB+). Incubation: overnight at 4°C. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	IHC-P: Human pituitary gland	

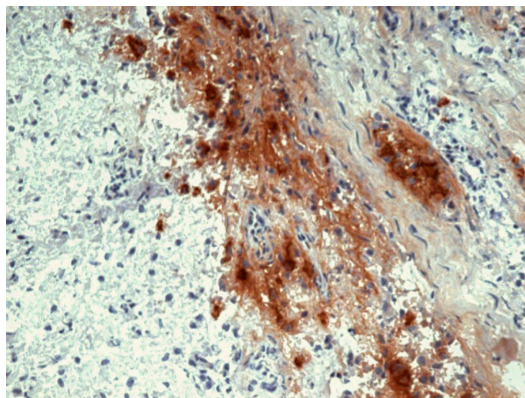
### Properties

Form	Liquid
Purification	Purified from hybridoma culture supernatant by protein A-affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide

Preservative	15 mM Sodium azide
Concentration	1 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	<a href="#">GeneID: 5443 Human</a> <a href="#">Swiss-port # P01189 Human</a>
Gene Symbol	POMC
Gene Full Name	proopiomelanocortin
Background	<p>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. [provided by RefSeq, Nov 2014]</p>
Function	<p>ACTH stimulates the adrenal glands to release cortisol.</p> <p>MSH (melanocyte-stimulating hormone) increases the pigmentation of skin by increasing melanin production in melanocytes.</p> <p>Beta-endorphin and Met-enkephalin are endogenous opiates. [UniProt]</p>
Highlight	<p>Related news:</p> <p><a href="#">Studying obesity and appetite control by quantifying orexigenic and anorexigenic hormones;</a></p>
Research Area	Cancer antibody; Metabolism antibody; Neuroscience antibody; Signaling Transduction antibody
Calculated Mw	29 kDa
PTM	<p>Specific enzymatic cleavages at paired basic residues yield the different active peptides.</p> <p>O-glycosylated; reducing sugar is probably N-acetylgalactosamine.</p>



ARG62675 anti-beta Endorphin antibody [B31.15] IHC-Fr image

Immunohistochemistry: Human pituitary gland (frozen sections) stained with ARG62675 anti-beta Endorphin antibody [B31.15].