10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.622.0609

POMC Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant POMC.

Catalog # AT3381a

Specification

POMC Antibody (monoclonal) (M01) - Product Information

Application	**WB, E**
Primary Accession	P01189
Other Accession	NM_000939
Reactivity	**Human**
Host	**mouse**
Clonality	**Monoclonal**
Isotype	**IgG1 Kappa**
Calculated MW	**29424**

POMC Antibody (monoclonal) (M01) - Additional Information

Gene ID 5443

Other Names
Pro-opiomelanocortin, POMC, Corticotropin-lipotropin, NPP, Melanotropin gamma, Gamma-MSH, Potential peptide, Corticotropin, Adrenocorticotropic hormone, ACTH, Melanotropin alpha, Alpha-MSH, Corticotropin-like intermediary peptide, CLIP, Lipotropin beta, Beta-LPH, Lipotropin gamma, Gamma-LPH, Melanotropin beta, Beta-MSH, Beta-endorphin, Met-enkephalin, POMC

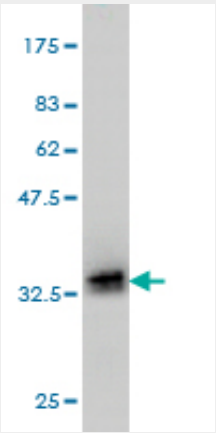
Target/Specificity
POMC (NP_000930, 205 a.a. ~ 267 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution
WB~~1:500~1000

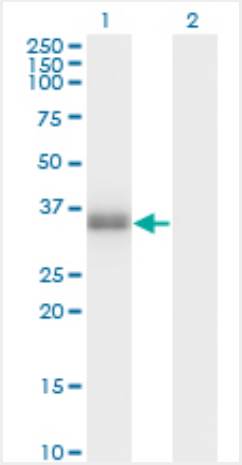
Format
Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage
Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (32.67 KDa) .



Western Blot analysis of POMC expression in transfected 293T cell line by POMC monoclonal antibody (M01), clone 3E11.

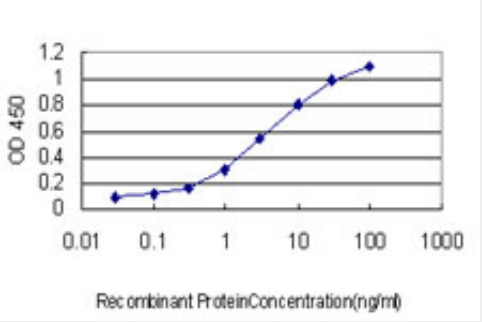
Lane 1: POMC transfected lysate(29.4 KDa).
Lane 2: Non-transfected lysate.

POMC Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

POMC Antibody (monoclonal) (M01) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



Detection limit for recombinant GST tagged POMC is approximately 0.1ng/ml as a capture antibody.

POMC Antibody (monoclonal) (M01) - 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.

POMC Antibody (monoclonal) (M01) - References

Comprehensive analysis of common genetic variation in 61 genes related to steroid

hormone and insulin-like growth factor-I metabolism and breast cancer risk in the NCI breast and prostate cancer cohort consortium. Canzian F, et al. Hum Mol Genet, 2010 Oct 1. PMID 20634197.Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.KdPT, a tripeptide derivative of alpha-melanocyte-stimulating hormone, suppresses IL-1 beta-mediated cytokine expression and signaling in human sebocytes. Mastrofrancesco A, et al. J Immunol, 2010 Aug 1. PMID 20610647.Physiogenomic analysis of statin-treated patients: domain-specific counter effects within the ACACB gene on low-density lipoprotein cholesterol? Rua?o G, et al. Pharmacogenomics, 2010 Jul. PMID 20602615.Association study of 182 candidate genes in anorexia nervosa. Pinheiro AP, et al. Am J Med Genet B Neuropsychiatr Genet, 2010 Jul. PMID 20468064.