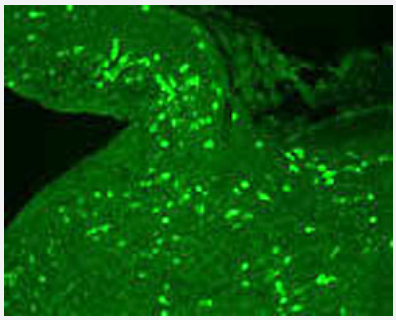
POMC (gamma) polyclonal antibody

Catalog # PAB14307 Size 50 uL

Applications



Immunofluorescence

The cryostat section of the sheep hypothalamus was incubated in POMC (gamma) polyclonal antibody (Cat # PAB14307) at the dilution of 1 : 1000 overnight followed by incubation with FITC- conjugated secondary antibodies. Cell bodies and nerve terminals in the sheep brain are intensely stained.

Specification

Product Description	Guinea pig polyclonal antibody raised against synthetic peptide of POMC (gamma).
Immunogen	A synthetic peptide (conjugated with carrier protein) corresponding to amino acids 77-88 of human POMC (gamma).
Sequence	YVMGHFRWDRFG
Host	Guinea pig
Reactivity	Human, Sheep
Form	Lyophilized
Recommend Usage	Immunohistochemistry (1:2000) The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from PBS
Storage Instruction	Store at 4°C on dry atmosphere. After reconstitution with deionized water, store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Immunohistochemistry
- Immunofluorescence

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Gene Info — POMC

Entrez GeneID	5443
Protein Accession#	P01189
Gene Name	POMC
Gene Alias	ACTH, CLIP, LPH, MSH, NPP, POC
Gene Description	proopiomelanocortin
Omim ID	176830 609830
Gene Ontology	Hyperlink
Gene Summary	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
Other Designations	OTTHUMP00000119991|adrenocorticotropic hormone|adrenocorticotropin|alpha-MSH|alpha-melanocyte-stimulating hormone|beta-LPH|beta-MSH|beta-endorphin|beta-melanocyte-stimulating hormone|corticotropin-like intermediary peptide|gamma-LPH|gamma-MSH|lipotropin b

Publication Reference

- Prenatal development of hypothalamic neuropeptide systems in the nonhuman primate.

  Grayson BE, Allen SE, Billes SK, Williams SM, Smith MS, Grove KL.

  Neuroscience 2006 Dec; 143(4):975.

Pathway

- Adipocytokine signaling pathway
- Melanogenesis
- Neuroactive ligand-receptor interaction

Disease

- Adenocarcinoma
- Alcoholism
- Anorexia Nervosa
- Asthma
- Atherosclerosis
- Attention Deficit Disorder with Hyperactivity
- Autistic Disorder
- Body Weight
- Breast Neoplasms
- Bulimia
- Carcinoma
- Cardiovascular Diseases
- Chronic Disease
- Colon cancer
- Colonic Neoplasms
- Connective Tissue Diseases

- Diabetes Mellitus
- Disease Models
- Disease Susceptibility
- Drug Toxicity
- Edema
- Esophageal Neoplasms
- Fatigue Syndrome
- Fetal Diseases
- Genetic Predisposition to Disease
- Hypercholesterolemia
- Hyperparathyroidism
- Infection
- Inflammation
- Lymphoma
- Malignant melanoma
- Melanoma
- Mental Disorders
- Metabolic Syndrome X
- Microsatellite Instability
- Musculoskeletal Diseases
- NARP
- Obesity
- Osteoporosis
- Ovarian Failure
- Pain
- Parkinson disease

- Polycystic Ovary Syndrome
- Pregnancy Complications
- Premature Birth
- Prostate cancer
- Prostatic Neoplasms
- Psychiatric Status Rating Scales
- Psychophysiologic Disorders
- Puberty
- Skin Diseases
- Skin Neoplasms
- Somatoform Disorders
- Substance-Related Disorders
- Thinness
- Thrombophilia
- Tobacco Use Disorder
- Translocation
- Weight Loss