

Summary

Production Name	ACTH Mouse Monoclonal Antibody
Description	Mouse Monoclonal Antibody
Host	Mouse
Application	ICC,FC,ELISA
Reactivity	Human

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	Mouse IgG1
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Purified antibody in PBS with 0.05% sodium azide
Purification	Affinity Purification

Immunogen

Gene Name	ACTH
Alternative Names	POMC; LPH; MSH; NPP; POC; CLIP
Gene ID	5443.0
SwissProt ID	P01189.Purified recombinant fragment of human ACTH expressed in E. Coli.

Application

Dilution Ratio	ICC:1:200-1:1000,FC:1:200-1:400,ELISA:1:10000
Molecular Weight	29.4kDa

Background

This gene encodes a preproprotein that undergoes extensive, tissue-specific, post-translational processing via cleavage by

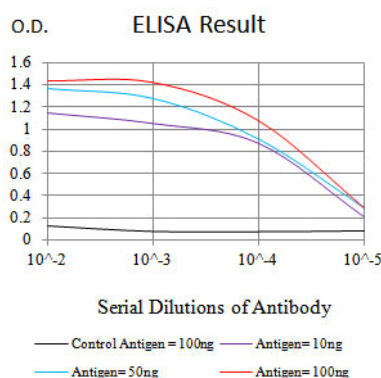
Product Name: ACTH Mouse Monoclonal Antibody
Catalog #: AMM82494



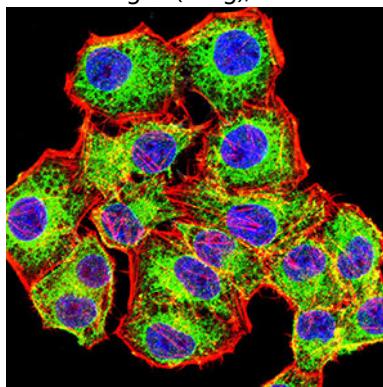
subtilisin-like enzymes known as prohormone convertases. There are eight potential cleavage sites within the preproprotein and, depending on tissue type and the available convertases, processing may yield as many as ten biologically active peptides involved in diverse cellular functions. The encoded 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.

Research Area

Image Data

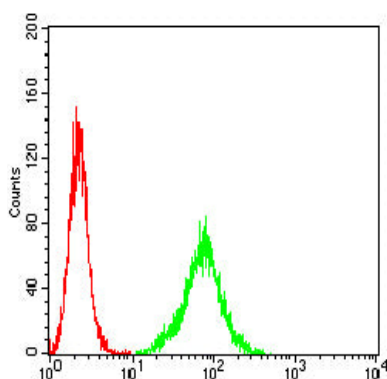


Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line: Antigen (100 ng)

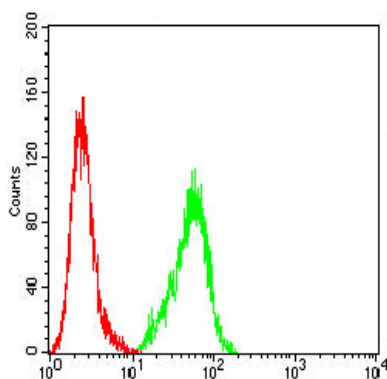


Immunofluorescence analysis of HeLa cells using ACTH mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor- 555 phalloidin. Secondary antibody from Fisher (Cat#: 35503)

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Flow cytometric analysis of Hela cells using ACTH mouse mAb (green) and negative control (red).



Flow cytometric analysis of MCF-7 cells using ACTH mouse mAb (green) and negative control (red).

Note

For research use only.