

# Recombinant ACTH (Adrenocorticotrophic Hormone) (N-Terminal) (Pituitary Marker) Antibody

Mouse Monoclonal Antibody [Clone r57]

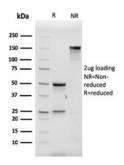
Catalog No	Format	Size
5443-MSM6-P0	Purified Ab with BSA and Azide	200ug/ml
5443-MSM6-P1	Purified Ab with BSA and Azide	200ug/ml
5443-MSM6-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

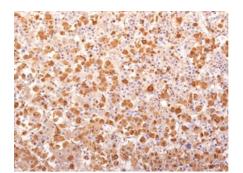
Applications	Tested Dillution
Immunohistochemistry (IHC)	1-2ug/ml

Product Details		
Clone	r57	
Gene Name	POMC	
Immunogen	N-terminal fragment of human ACTH conjugated to KLH	
Host	Mouse	
Clonality	Monoclonal	
Isotype / Light Chain	IgG1 / Kappa	
Mol. Weight of Antigen	ACTH is ~5kDa and the POMC precursor is ~30kDa. The molecular weight of POMC depends upon isoform variation and post-translational modifications.	
Cellular Localization	Secreted	
Species Reactivity	Human, Mouse, Rat	
Positive Control	Normal pituitary gland or pituitary tumor.	

<sup>\*</sup>Optimal dilution for a specific application should be determined.

## Product Images for Recombinant ACTH (Adrenocorticotrophic Hormone) (N-Terminal) (Pituitary Marker) Antibody





SDS-PAGE Analysis of Purified ACTH Recombinant Mouse Monoclonal Antibody (r57). Confirmation of Purity and Integrity of Antibody.

Formalin-fixed, paraffin-embedded human pituitary gland stained with ACTH Recombinant Mouse Monoclonal Antibody (r57).

#### **Specificity & Comments**

ACTH (same as Corticotropin) is a 39 amino acid active peptide produced by the anterior pituitary. This MAb is specific to Synacthen (aa1-24 of ACTH); does not react with CLIP (aa17-39 of ACTH). POMC (pro-opiomelanocortin or corticotropin-lipotropin) is a 267 amino acid polypeptide hormone precursor that goes through extensive. tissue-specific posttranslational processing convertases. POMC is cleaved into ten hormone chains named NPP, ACTH, alpha-MSH (Melanocyte Stimulating Hormone), beta-MSH, gamma-MSH, CLIP (corticotropin-like intermediary peptide), Lipotropin-beta, Lipotropin-gamma, beta-endorphin and Metenkephalin. ACTH is also produced by cells of immune system (Tcells, B-cells, and macrophages) in response to stimuli associated with stress. Anti-ACTH is a useful marker in classification of pituitary tumors and the study of pituitary disease. It reacts with ACTHproducing cells (corticotrophs).It also may react with other tumors (e.g. some small cell carcinomas of the lung) causing paraneoplastic syndromes by secreting ACTH.

#### **Research Areas**

Immunology, Neuroscience, Cytokine Signaling, Infectious Disease, Signal Transduction, Transcription Factors

#### **Known Applications & Suggested Dilutions**

ELISA (For coating, order Ab without BSA) | ,Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95 &degC followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.

#### Supplied As

200ug/ml of recombinant MAb purified by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

### Storage and Stability

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

#### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis.

There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.