

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

Mouse Monoclonal Antibody [Clone 57]

| Catalog No      | Format  | Size   |
|-----------------|---|--------|
| 5443-MSM2-P0    | Purified Ab with BSA and Azide at 200ug/ml    | 20 ug  |
| 5443-MSM2-P1    | Purified Ab with BSA and Azide at 200ug/ml    | 100 ug |
| 5443-MSM2-P1ABX | Purified Ab WITHOUT BSA and Azide at 1.0mg/ml | 100 ug |

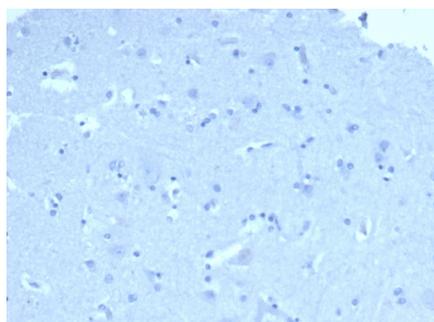
| Applications               | Tested Dillution    | Note  |
|----------------------------|---------------------|---|
| Flow Cytometry (Flow)      | 1-2ug/million cells |   |
| Immunofluorescence (IF)    | 1-3ug/ml            |   |
| Immunohistochemistry (IHC) | 1-2ug/ml            | 30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes |

### Product Details

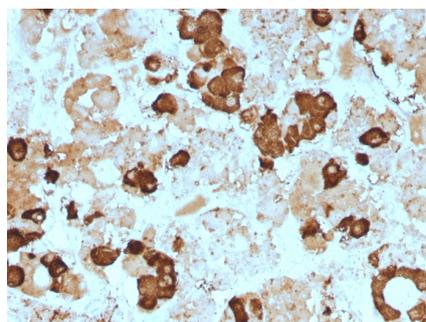
|                               |   |
|-------------------------------|---|
| <b>Clone</b>                  | 57  |
| <b>Gene Name</b>              | POMC  |
| <b>Immunogen</b>              | Recombinant fragment corresponding to human ACTH (N-terminal) conjugated to keyhole limpet haemocyanin.   |
| <b>Host</b>                   | Mouse   |
| <b>Clonality</b>              | Monoclonal  |
| <b>Isotype / Light Chain</b>  | IgG1 / Kappa  |
| <b>Mol. Weight of Antigen</b> | ACTH is ~5kDa and the POMC precursor is ~30kDa. The molecular weight of POMC depends upon isoform variation and post-translational modifications. |
| <b>Cellular Localization</b>  | Secreted  |
| <b>Species Reactivity</b>     | Human, Mouse, Rat   |
| <b>Positive Control</b>       | Normal pituitary gland or pituitary tumor.  |

*\*Optimal dilution for a specific application should be determined.*

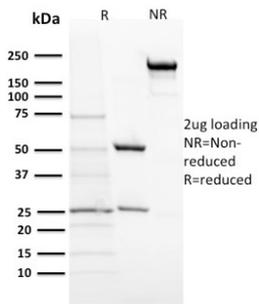
### Product Images for ACTH (Adrenocorticotrophic Hormone) (N-Terminal) (Pituitary Marker) Antibody



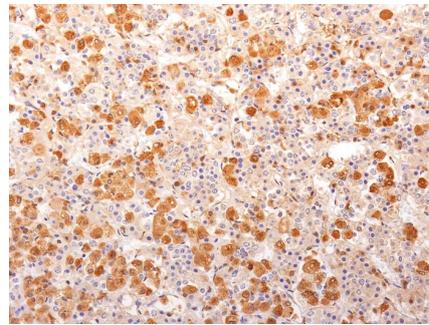
IHC analysis of formalin-fixed, paraffin-embedded human brain. Negative tissue control using ACTH MAb (57) at 2ug/ml in PBS for 30min RT. HIER: Tris/EDTA, pH9.0, 45min. 2°C: HRP-polymer, 30min. DAB, 5min.



Formalin-fixed, paraffin-embedded human pituitary gland stained with ACTH Mouse Monoclonal Antibody (57).



SDS-PAGE Analysis of Purified ACTH Mouse Monoclonal Antibody (57). Confirmation of Integrity and Purity of Antibody.



Formalin-fixed, paraffin-embedded human pituitary gland stained with ACTH Mouse Monoclonal Antibody (57).

### 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 by 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 Met-enkephalin. ACTH is also produced by cells of immune system (T-cells, 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 ACTH-producing cells (corticotrophs). It also may react with other tumors (e.g. some small cell carcinomas of the lung) causing paraneoplastic syndromes by secreting ACTH.

### 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.

### Supplied As

200ug/ml of Ab purified from Bioreactor Concentrate 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.

### Research Areas

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