

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

Mouse Monoclonal Antibody [Clone SPM501]

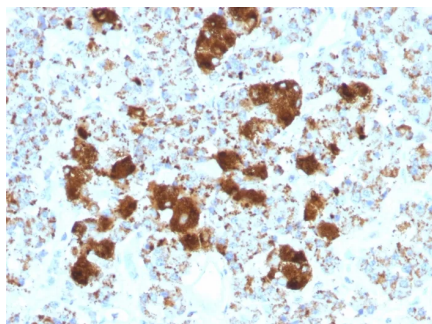
Catalog No	Format	Size
5443-MSM7X-P0	Purified Ab with BSA and Azide	200ug/ml
5443-MSM7X-P1	Purified Ab with BSA and Azide	200ug/ml
5443-MSM7X-P1ABX	Purified Ab WITHOUT BSA and Azide	1.0mg/ml

Applications	Tested Dillution
Flow Cytometry (Flow)	1-2ug/million cells
Immunofluorescence (IF)	1-3ug/ml
Immunohistochemistry (IHC)	1-2ug/ml

Product Details	
Clone	SPM501
Gene Name	POMC
Immunogen	Synthetic peptide corresponding to aa25-39 of human ACTH (NGAEDESAAEFPLEF)
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
Positive Control	Normal pituitary gland or pituitary tumor.

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

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



Formalin-fixed, paraffin-embedded human Pituitary stained with ACTH Monoclonal Antibody (SPM501).

### Specificity & Comments

ACTH (same as Corticotropin) is a 39 amino acid active peptide produced by the anterior pituitary. This MAb is specific to CLIP (aa25-39 of ACTH); does not react with Synacthen (aa1-24 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. '

### Research Areas

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

### Known Applications & Suggested Dilutions

ELISA (For coating, order Ab without BSA) | Flow Cytometry (1-2ug/million cells) | Immunofluorescence (1-2ug/ml) | 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.

### 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.