

ACTH (Clone ZM98)

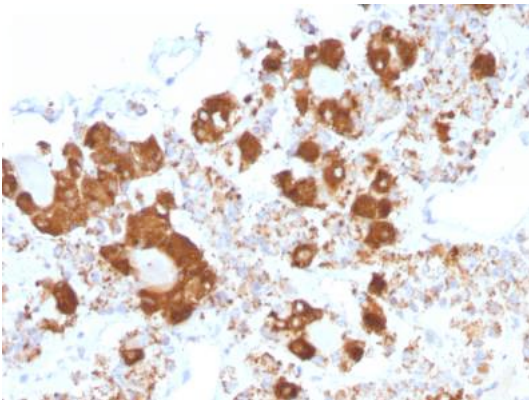
Mouse Monoclonal Antibody

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| Specificity: | Human. Others-not tested |
| Immunogen: | Synthetic peptide corresponding to aa25-39 of human ACTH (NGAEDESAAEAFPLEF) |
| Ig Class: | IgG1 |
| Storage: | Store vial at 4°C. When stored at 2-8°C, this antibody is stable for 24 months |

Staining procedures: Use formalin-fixed and paraffin-embedded sections. *Retrieval conditions:* For formalin-fixed tissues, optimal results are obtained by pretreating tissues with heat-induced epitope retrieval using high pH target retrieval solution. *Detection methods:* Polymer anti-mouse/rabbit Ig detection system. *Working dilution:* 1:100-200; *Positive Control:* Pituitary. *Cellular Localization:* Cytoplasmic and nuclear. *Intended Use:* In vitro diagnosis (IVD).

Description: 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.

Supplied As: Purified antibody with 0.2% BSA and 15mM sodium azide.



References:

1. Pizarro CB, et al. *Am J Med Sci.* 2002; 324:326-30.
2. Fan X, et al. *J Histochem Cytochem.* 2002; 50:1509-16.
3. Japon MA, et al.: *J Clin Endocrinol Metab.* 2002; 87:1879-84.

Formalin-fixed, paraffin-embedded human pituitary stained with anti-ALDH1A1 monoclonal antibody using peroxidase-conjugate and DAB chromogen. Note the cytoplasmic/nuclear staining of ACTH secreting cells

Cat. #Z2408 (1.0 ml)