

**Mouse Anti-ACTH [2F6]: MC0601, MC0601RTU7**

**Intended Use:** For Research Use Only

**Description:** ACTH (Corticotropin) is a 39 amino acid active peptide produced by the anterior pituitary. This antibody 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.

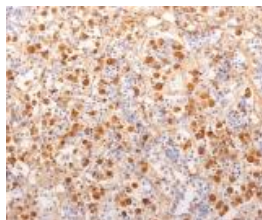
**Specifications:**

Clone: 2F6  
Source: Mouse  
Isotype: IgG1k  
Reactivity: Human, mouse, rat  
Localization: Cytoplasm, secreted  
Formulation: Antibody in PBS pH7.4, containing BSA and  $\leq 0.09\%$  sodium azide (NaN<sub>3</sub>)  
Storage: Store at 2°- 8°C  
Applications: IHC, Flow Cyt., IF  
Package:

Description	Catalog No.	Size
ACTH Concentrated	MC0601	1 ml
ACTH Prediluted	MC0601RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Pituitary gland or pituitary adenoma  
Concentrated Dilution: 50-200  
Pretreatment: Citrate pH6.0 or EDTA pH8.0 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C  
Incubation Time and Temp: 30-60 minutes @ RT  
Detection: Refer to the detection system manual  
\* Result should be confirmed by an established diagnostic procedure.



FFPE human pituitary gland stained with anti-ACTH using DAB

**References:**

1. Cloning of corticotropin-releasing hormone (CRH) precursor cDNA and immunohistochemical detection of CRH peptide in the brain of the Japanese eel, paying special attention to gonadotropin-releasing hormone. Amano M, et al. Cell Tissue Res. Apr;356(1):243-51, 2014.
2. Histological and immunohistochemical characteristics of ACTH-secreting tumors. Lapshina AM, et al. May-Jun;75(3):8-13, 2013.
3. ACTH-secreting pheochromocytoma with false-negative ACTH immunohistochemistry. Cassarino MF, et al. ndocr Pathol. Sep;23(3):191-5, 2012.

Doc. 100-MC0601  
Rev. A