

Mouse Anti-ACTH [AH26]: MC0279, MC0279RTU7

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:

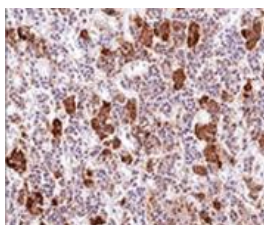
Clone: AH26
 Source: Mouse
 Isotype: IgG1
 Reactivity: Human, mouse, rat
 Localization: Cytoplasm
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, Flow Cyt., ICC/IF
 Package:

Description	Catalog No.	Size
ACTH Concentrated	MC0279	1 ml
ACTH Prediluted	MC0279RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Pituitary gland or pituitary adenoma
 Concentrated Dilution: 20-100
 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-MC0279
Rev. A