

Datasheet for ABIN6940339

Recombinant anti-POMC antibody (N-Term)

2 Images

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Overview

Quantity:	100 µg
Target:	POMC
Binding Specificity:	N-Term
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Antibody Type:	Recombinant Antibody
Clonality:	Monoclonal
Application:	ELISA, Immunohistochemistry (IHC), Coating (Coat), Staining Methods (StM)

Product Details

Immunogen:	N-terminal fragment of human ACTH conjugated to KLH
Clone:	R57
Isotype:	IgG1 kappa
Specificity:	ACTH (same as Corticotropin) is a 39 amino acid active peptide produced by the anterior pituitary. This MAbs 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

Product Details

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. '

Cross-Reactivity (Details): Expected to show a broad species reactivity.

Purification: Purified by Protein A/G

Target Details

Target: POMC

Alternative Name: POMC ([POMC Products](#))

Molecular Weight: ACTH is ~5kDa, and the POMC precursor is ~30kDa. The molecular weight of POMC depends upon isoform variation and post-translational modifications.

Gene ID: 5443

UniProt: [P01189](#)

Pathways: [Metabolism of Steroid Hormones and Vitamin D](#), [Peptide Hormone Metabolism](#), [Hormone Activity](#), [Feeding Behaviour](#)

Application Details

Application Notes: Positive Control: Normal pituitary gland or pituitary tumor.
Known Application: ELISA (For coating, order Ab without BSA), Immunohistochemistry (Formalin-fixed) (0.5-1.0 µg/mL for 30 minutes at RT) (Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes) Optimal dilution for a specific application should be determined.

Restrictions: For Research Use only

Handling

Concentration: 200 µg/mL

Buffer: 10 mM PBS with 0.05 % BSA & 0.05 % azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

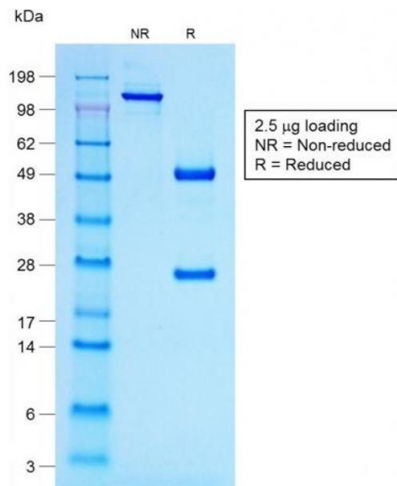
Handling

Storage: 4 °C, -80 °C

Storage Comment: 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.

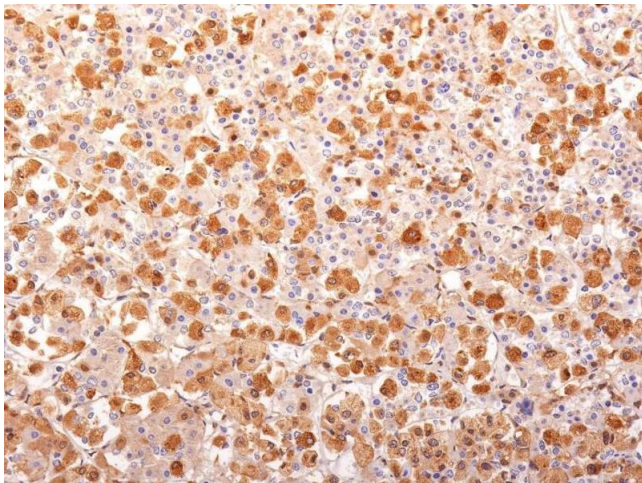
Expiry Date: 24 months

Images



SDS-PAGE

Image 1. SDS-PAGE Analysis Purified ACTH Mouse Recombinant Monoclonal Antibody (r57). Confirmation of Purity and Integrity of Antibody.



Immunohistochemistry

Image 2. Formalin-fixed, paraffin-embedded human Pituitary Gland stained with ACTH Mouse Recombinant Monoclonal Antibody (r57).