

Product datasheet

Anti-ACTH antibody [57] - N-terminal ab233954

Recombinant

6 Images

Overview

Product name	Anti-ACTH antibody [57] - N-terminal
Description	Mouse monoclonal [57] to ACTH - N-terminal
Host species	Mouse
Tested applications	Suitable for: mIHC, IHC-P Unsuitable for: Flow Cyt, ICC or WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Recombinant fragment corresponding to Human ACTH (N terminal) conjugated to keyhole limpet haemocyanin. Database link: P01189
Positive control	IHC-P: Human, mouse and rat pituitary gland tissues. mIHC: Human pituitary gland.
General notes	This product was switched from a hybridoma to recombinant production format on 25 th November 2021. This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information see here .

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
Purity	Protein A purified
Clonality	Monoclonal
Clone number	57

Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab233954 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
mlHC		1/5000.
IHC-P		1/5000 - 1/20000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Recommend 1:5000 for human species and 1:20, 000 for mouse and rat species

Application notes Is unsuitable for Flow Cyt,ICC or WB.

Target

Relevance ACTH occurs in cells of the anterior pituitary and in neurons in brain. It regulates the corticosteroid production in the adrenal cortex. Beta endorphin and Met enkephalin are endogenous opiates. MSH (melanocyte stimulating hormone) increases the pigmentation of skin by increasing melanin production in melanocytes.

Cellular localization Secreted

Images

Multiplex immunohistochemistry - Anti-ACTH antibody [57] - N-terminal (ab233954)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human pituitary gland labelling ACTH with ab233954 at 1/5000 dilution (0.214 µg/ml) (B), Luteinizing Hormone beta with **ab221494** at 1/4000 dilution (0.258 µg/ml) (C) and Growth Hormone with **ab155276** at 1/5000 dilution (0.044 µg/ml) (D). Opal Polymer HRP Ms + Rb was used as a secondary antibody, and DAPI was used for a nuclear counter stain. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

Panel A: merged staining of anti-Growth Hormone (gray; Opal™690), anti-ACTH (green; Opal™520) and anti-Luteinizing Hormone beta (red; Opal™570) on human pituitary gland.

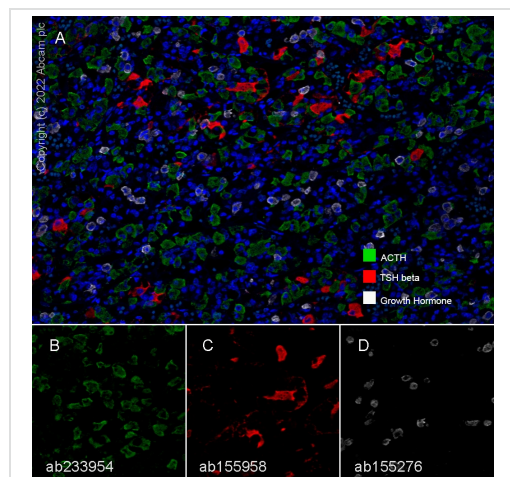
Panel B: anti-ACTH stained on corticotrophs.

Panel C: anti-Luteinizing Hormone beta stained on gonadotrophs.

Panel D: anti-Growth Hormone stained on somatotrophs.

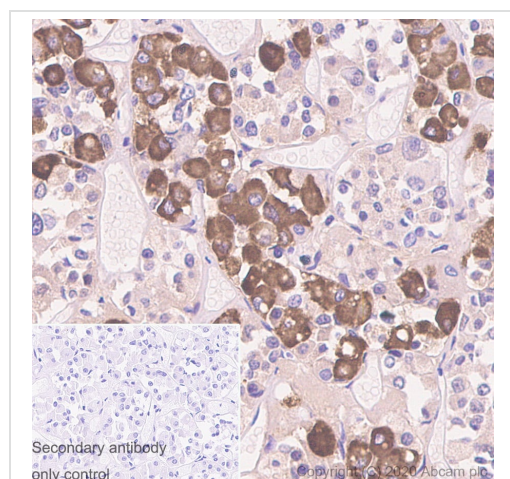
The section was incubated in three rounds of staining: in the order of **ab155276**, ab233954, and **ab221494** for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.



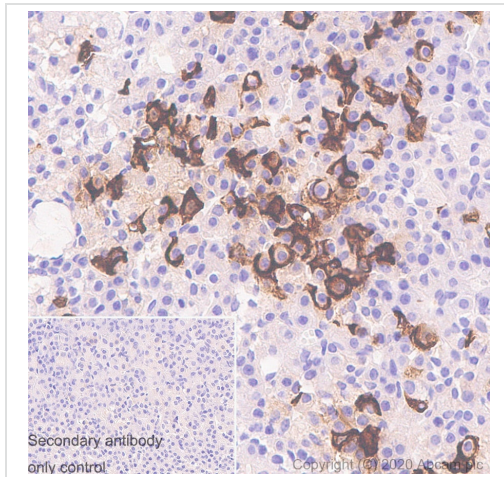
Multiplex immunohistochemistry - Anti-ACTH antibody [57] - N-terminal (ab233954)

Fluorescence multiplex immunohistochemical analysis of human pituitary gland tissue (formalin-fixed paraffin-embedded section). Panel A shows merged staining of anti-ACTH stained on corticotrophs (ab233954; green; Opal™520) at 1:5000 (0.214 µg/ml) [Panel B], anti-TSH beta stained on thyrotrophs (**ab155958**; red; Opal™570) at 1:500 (1.728 µg/ml) [Panel C], and anti-Growth Hormone stained on somatotrophs (**ab155276**; gray; Opal™690) at 1:5000 (0.044 µg/ml) [Panel D] on human pituitary gland. DAPI was used as a nuclear counter stain. Followed by Opal Polymer HRP Ms + Rb secondary antibody. The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope. The section was incubated in three rounds of staining: in the order of **ab155276**, ab233954, and **ab155958** for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins was used.



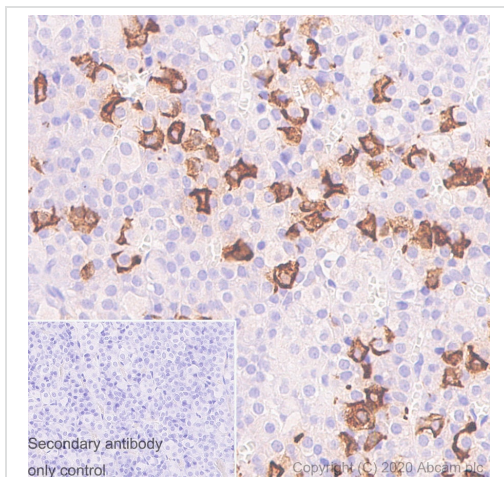
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACTH antibody [57] - N-terminal (ab233954)

Immunohistochemical analysis of Human pituitary gland tissue stained for ACTH using ab233954 at 1/5000 dilution. Positive staining on human pituitary gland. The section was incubated with ab233954 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



Immunohistochemical analysis of Mouse pituitary gland tissue stained for ACTH using ab233954 at 1/20000 dilution. Positive staining on mouse pituitary gland. The section was incubated with ab233954 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACTH antibody [57] - N-terminal (ab233954)



Immunohistochemical analysis of Rat pituitary gland tissue stained for ACTH using ab233954 at 1/20000 dilution. Positive staining on rat pituitary gland. The section was incubated with ab233954 for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACTH antibody [57] - N-terminal (ab233954)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-ACTH antibody [57] - N-terminal (ab233954)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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