abcam

Product datasheet

Anti-ACTH antibody [57] - N-terminal- BSA and Azide free ab212736



6 Images

Overview

Product name Anti-ACTH antibody [57] - N-terminal- BSA and Azide free

Description Mouse monoclonal [57] to ACTH - N-terminal - BSA and Azide free

Host species Mouse

Tested applications Suitable for: IHC-P, mIHC

Species reactivity Reacts with: Mouse, Rat, Human

Predicted to work with: Sheep, Guinea pig, Cow, a wide range of other species, Macaque

monkey 4

Immunogen Synthetic peptide corresponding to Human ACTH (N terminal) conjugated to keyhole limpet

haemocyanin.

Database link: P01189

Positive control IHC: Human, mouse, rat pituitary gland tissues. mIHC: Human pituitary gland.

This product was switched from a hybridoma to recombinant production format on 25th November General notes

2021.

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

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. Do Not Freeze.

Storage buffer pH: 7.20

Constituent: 100% PBS

Carrier free Yes

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 ab212736 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
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
mIHC		Use at an assay dependent concentration.

Relevance	ACTH occurs in cells of the anterior pituitary and in neurons in brain. It rec

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.

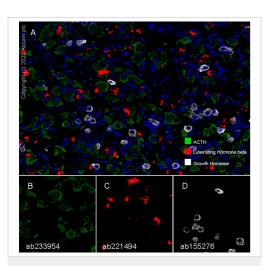
MSH (melanocyte stimulating hormone) increases the pigmentation of skin by increasing melanin

production in melanocytes.

Cellular localization Secreted

Images

Target



Multiplex immunohistochemistry - Anti-ACTH antibody [57] - N-terminal- BSA and Azide free (ab212736)

This data was developed using <u>ab233954</u>, the same antibody clone in a different buffer formulation.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human pituitary gland labelling ACTH with <u>ab233954</u> at 1/5000 dilution (0.214 μ g/ml) (B), Luteinizing Hormone beta with <u>ab221494</u> at 1/4000 dilution (0.258 μ g/ml) (C) and Growth Hormone with <u>ab155276</u> at 1/5000 dilution (0.044 μ g/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.

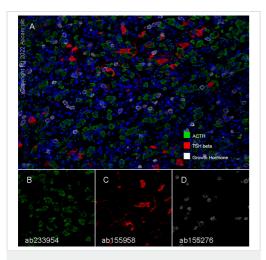
Panel A: merged staining of anti-Growth Hormone (gray; Opal[™]690), anti-ACTH (green; Opal[™]520) and anti-Luteinizing Hormone beta (red; Opal[™]570) on human pituitary gland. Panel B: anti-ACTH stained on corticotrophs.

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

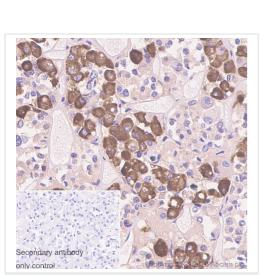
Panel D: anti-Growth Hormone stained on somatotrophs.

The section was incubated in three rounds of staining: in the order of <u>ab155276</u>, <u>ab233954</u>, and <u>ab221494</u> 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- BSA and Azide free (ab212736)



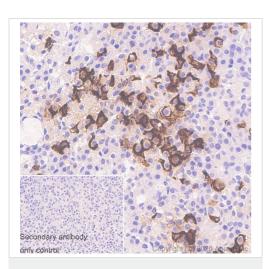
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ACTH antibody [57] - N-terminal- BSA and Azide free (ab212736)

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 <u>ab155276</u>, <u>ab233954</u>, and <u>ab155958</u> 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.

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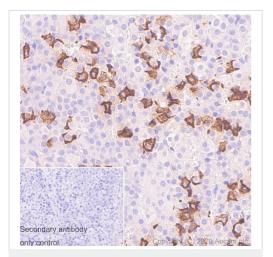
Immunohistochemical analysis of Human pituatary gland tissue stained for ACTH using <u>ab233954</u> at 1/5000 dilution. Positive staining on human pituitary gland. The section was incubated with <u>ab233954</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND®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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ACTH antibody [57] - N-terminal- BSA and Azide free (ab212736)

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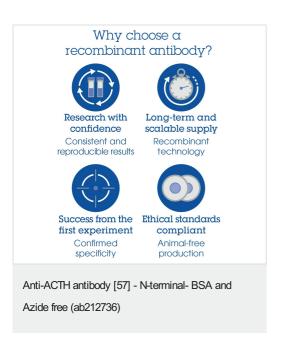
Immunohistochemical analysis of Mouse pituatary gland tissue stained for ACTH using <u>ab233954</u> at 1/20000 dilution. Positive staining on mouse pituitary gland. The section was incubated with <u>ab233954</u> for 30 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND®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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ACTH antibody [57] - N-terminal- BSA and Azide free (ab212736)

This data was developed using <u>ab233954</u>, the same antibody clone in a different buffer formulation.

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



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