abcam

Product datasheet

Anti-AACT antibody [EPR17088-68] - BSA and Azide free ab223542

Recombinant RabMAb

4 Images

Overview

Product name	Anti-AACT antibody [EPR17088-68] - BSA and Azide free
Description	Rabbit monoclonal [EPR17088-68] to AACT - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IP, ICC/IF, WB, IHC-P
Species reactivity	**Reacts with:** Human
Immunogen	Full length native protein (purified). This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human plasma (untreated and PNGase F treated) and blood; Human fetal spleen lysate. IHC-P: Human tonsil tissue. ICC/IF: Raji cells. IP: Human plasma lysate.
General notes	ab223542 is the carrier-free version of **ab205198**. 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 cell-based 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 compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR17088-68
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab223542 in the following tested applications.

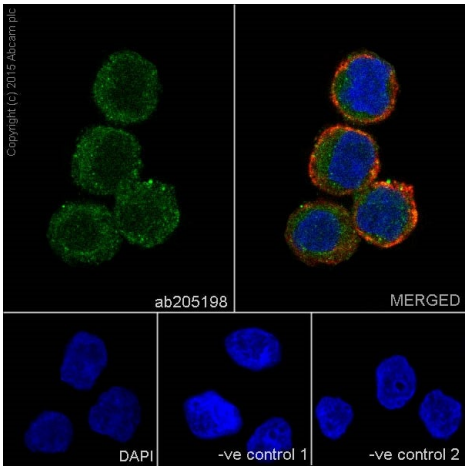
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 50-70 kDa (predicted molecular weight: 47 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function	Although its physiological function is unclear, it can inhibit neutrophil cathepsin G and mast cell chymase, both of which can convert angiotensin-1 to the active angiotensin-2.
Tissue specificity	Plasma. Synthesized in the liver. Like the related alpha-1-antitrypsin, its concentration increases in the acute phase of inflammation or infection. Found in the amyloid plaques from the hippocampus of Alzheimer disease brains.
Involvement in disease	Defects in SERPINA3 may be a cause of chronic obstructive pulmonary disease (COPD) [MIM:107280].
Sequence similarities	Belongs to the serpin family.
Domain	The reactive center loop (RCL) extends out from the body of the protein and directs binding to the target protease. The protease cleaves the serpin at the reactive site within the RCL, establishing a covalent linkage between the carboxyl group of the serpin reactive site and the serine hydroxyl of the protease. The resulting inactive serpin-protease complex is highly stable.
Cellular localization	Secreted.

Images



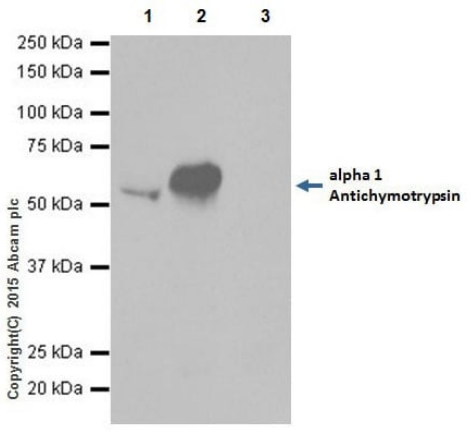
Immunocytochemistry/ Immunofluorescence - Anti-AACT antibody [EPR17088-68] - BSA and Azide free (ab223542)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Raji (Human Burkitt's lymphoma cell line) cells labeling AACT with **ab205198** at 1/50 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic and weak nuclear staining on Raji cell line.

The nuclear counter stain is DAPI (blue). Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (Alexa Fluor® 594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

The negative controls are as follows:
-ve control 1: **ab205198** at 1/50 dilution followed by **ab150120** (Alexa Fluor® 594 Goat anti-Mouse secondary) at 1/1000 dilution.
-ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor® 488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab205198**).



Immunoprecipitation - Anti-AACT antibody [EPR17088-68] - BSA and Azide free (ab223542)

AACT was immunoprecipitated from 1 mg of Human plasma lysate with **ab205198** at 1/40 dilution. Western blot was performed from the immunoprecipitate using **ab205198** at 1/1000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG was used as secondary antibody at 1/1500 dilution.

Lane 1: Human plasma lysate, 10 µg (Input).

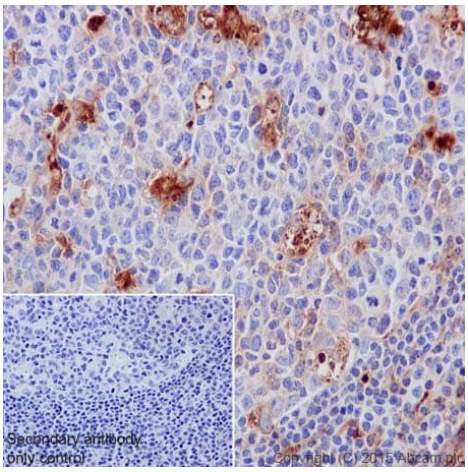
Lane 2: **ab205198** IP in Human plasma lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab205198** in Human plasma lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 30 seconds.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab205198**).



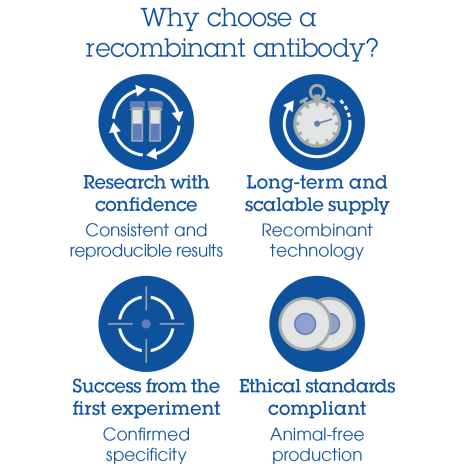
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-AACT antibody [EPR17088-68] - BSA and Azide free (ab223542)

This IHC data was generated using the same anti-AACT antibody clone [EPR17088-68] in a different buffer formulation (cat# **ab205198**).

Immunohistochemical analysis of paraffin-embedded human tonsil tissue labeling AACT with **ab205198** at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab205198**) at 1/500 dilution. Cytoplasmic staining on human tonsil tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



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