abcam

Product datasheet

Anti-Albumin antibody [EPR20195] - BSA and Azide free ab271979



5 Images

Overview

Product name Anti-Albumin antibody [EPR20195] - BSA and Azide free

Description Rabbit monoclonal [EPR20195] to Albumin - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: Flow Cyt (Intra), ICC/IF, WB, IP

Reacts with: Human **Species reactivity**

Predicted to work with: Mouse, Rat

Immunogen Full length native protein (purified) corresponding to Human Albumin aa 1 to the C-terminus.

(Purified Proteins from Normal Serum).

Database link: P02768

Positive control WB: Human, mouse and rat liver and plasma lysates. Human serum lysates. Human fetal kidney

and spleen lysates. Mouse and rat spleen and kidney lysates. HepG2, NIH/3T3 and PC-12 whole

cell lysates. CC/IF: HepG2 cells.Flow Cyt (intra): HepG2 cells. IP: HepG2 whole cell lysate.

General notes ab271979 is the carrier-free version of ab207327.

> 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 compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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.

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 EPR20195

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab271979 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
Flow Cyt (Intra)		Use at an assay dependent concentration. Permeabilization is required.
ICC/IF		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Predicted molecular weight: 69 kDa.
IP		Use at an assay dependent concentration.

Target

Function Serum albumin, the main protein of plasma, has a good binding capacity for water, Ca(2+), Na(+),

K(+), fatty acids, hormones, bilirubin and drugs. Its main function is the regulation of the colloidal osmotic pressure of blood. Major zinc transporter in plasma, typically binds about 80% of all

plasma zinc.

Tissue specificity Plasma.

Involvement in diseaseDefects in ALB are a cause of familial dysalbuminemic hyperthyroxinemia (FDH) [MIM:103600].

FDH is a form of euthyroid hyperthyroxinemia that is due to increased affinity of ALB for T(4). It is

the most common cause of inherited euthyroid hyperthyroxinemia in Caucasian population.

Sequence similarities Belongs to the ALB/AFP/VDB family.

Contains 3 albumin domains.

Post-translational modifications

Kenitra variant is partially O-glycosylated at Thr-620. It has two new disulfide bonds Cys-600 to

Cys-602 and Cys-601 to Cys-606.

Glycated in diabetic patients.

Phosphorylation sites are present in the extracelllular medium.

Acetylated on Lys-223 by acetylsalicylic acid.

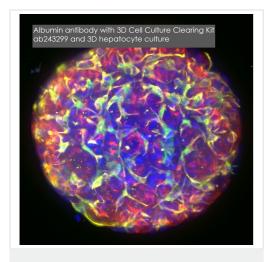
Cellular localization

Secreted.

Form

There are 2 isoforms produced by alternative splicing.

Images



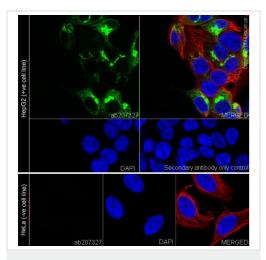
Immunocytochemistry/ Immunofluorescence - Anti-Albumin antibody [EPR20195] - BSA and Azide free (ab271979)

Albumin antibody <u>ab207327</u> was used with 3D Cell Culture Clearing Kit <u>ab243299</u> to penetrate, stain and clear a 3D hepatocyte cell culture.

Blue: DAPI, Green: CD68, Yellow: Albumin, Red: Vimentin

Learn more about <u>3D cell culture and tissue clearing kits</u>, <u>reagents</u>, <u>and protocols</u> designed to make it easier to stain 3D cell cultures and thick tissue sections and get more data from each valuable tissue section.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab207327**).



Immunocytochemistry/ Immunofluorescence - Anti-Albumin antibody [EPR20195] - BSA and Azide free (ab271979)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma cell line) or HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling Albumin with **ab207327** at 1/500 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor[®] 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing cytoplasmic staining on HepG2 cell line.

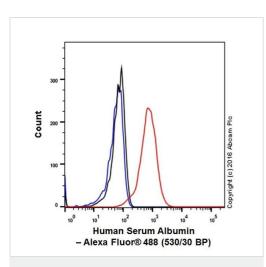
Negative control: HeLa (PMID: 10476216 and 8314088)).

The nuclear counterstain is DAPI (blue).

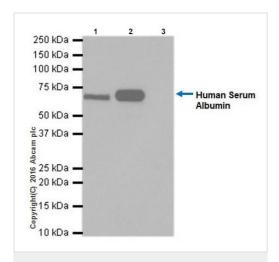
Tubulin is detected with <u>ab195889</u> (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor[®] 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) at 1/1000 dilution.

This data was developed using the same antibody clone in a



Flow Cytometry (Intracellular) - Anti-Albumin antibody [EPR20195] - BSA and Azide free (ab271979)



Immunoprecipitation - Anti-Albumin antibody
[EPR20195] - BSA and Azide free (ab271979)

different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab207327).

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed permeabilized HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling Albuminwith <u>ab207327</u> at 1/500 dilution (red) compared with a rabbit monoclonal lgG isotype control (<u>ab172730</u>; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit lgG (Alexa Fluor[®] 488) at 1/2000 dilution was used as the secondary antibody.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab207327).

Albumin was immunoprecipitated from 0.35 mg of HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate with <u>ab207327</u> at 1/40 dilution.

Western blot was performed from the immunoprecipitate using **ab207327** at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/10000 dilution.

Lane 1: HepG2 whole cell lysate, 10µg (Input).

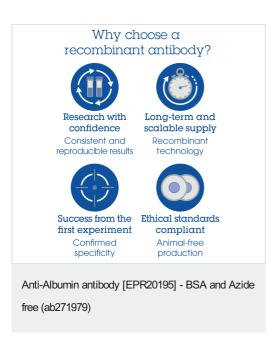
Lane 2: ab207327 IP in HepG2 whole cell lysate.

Lane 3: Rabbit monoclonal $\lg G$ ($\underline{ab172730}$) instead of $\underline{ab207327}$ in HepG2 whole cell 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 (<u>ab207327</u>).



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