abcam

Product datasheet

Anti-Prealbumin antibody [EPR20971] - BSA and Azide free ab230828

Recombinant RabMAb

6 Images

Overview

Product name	Anti-Prealbumin antibody [EPR20971] - BSA and Azide free
Description	Rabbit monoclonal [EPR20971] to Prealbumin - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, IP, IHC-Fr **Unsuitable for:** ICC/IF or WB
Species reactivity	**Reacts with:** Mouse
Immunogen	Recombinant full length protein. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-Fr: Mouse brain (choroid plexus) tissue.
General notes	ab230828 is the carrier-free version of **ab215202**. 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. 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	EPR20971
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab230828 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		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration. Perform heat-mediated antigen retrieval by using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). We recommend to optimize primary antibody dilution depending on the tissue being tested.

Application notes Is unsuitable for ICC/IF or WB.

Target

Function	Thyroid hormone-binding protein. Probably transports thyroxine from the bloodstream to the brain.
Tissue specificity	Detected in serum and cerebrospinal fluid (at protein level). Highly expressed in choroid plexus epithelial cells. Detected in retina pigment epithelium and liver.
Involvement in disease	Defects in TTR are the cause of amyloidosis transthyretin-related (AMYL-TTR) [MIM:105210]. A hereditary generalized amyloidosis due to transthyretin amyloid deposition. Protein fibrils can form in different tissues leading to amyloid polyneuropathies, amyloidotic cardiomyopathy, carpal tunnel syndrome, systemic senile amyloidosis. The disease includes leptomeningeal amyloidosis that is characterized by primary involvement of the central nervous system. Neuropathologic examination shows amyloid in the walls of leptomeningeal vessels, in pia arachnoid, and subpial deposits. Some patients also develop vitreous amyloid deposition that leads to visual impairment (oculoleptomeningeal amyloidosis). Clinical features include seizures, stroke-like episodes, dementia, psychomotor deterioration, variable amyloid deposition in the vitreous humor. Defects in TTR are a cause of hyperthyroxinemia dystransthyretinemic euthyroidal (HTDE)

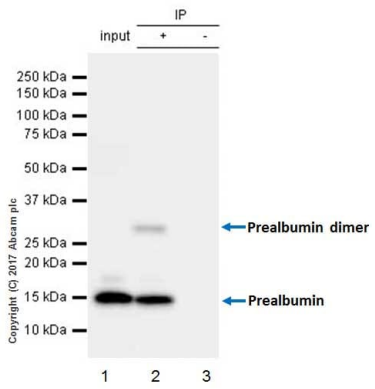
[MIM:145680]. It is a condition characterized by elevation of total and free thyroxine in healthy, euthyroid persons without detectable binding protein abnormalities.
Defects in TTR are a cause of carpal tunnel syndrome type 1 (CTS1) [MIM:115430]. It is a condition characterized by entrapment of the median nerve within the carpal tunnel. Symptoms include burning pain and paresthesias involving the ventral surface of the hand and fingers which may radiate proximally. Impairment of sensation in the distribution of the median nerve and thenar muscle atrophy may occur. This condition may be associated with repetitive occupational trauma, wrist injuries, amyloid neuropathies, rheumatoid arthritis.

Sequence similarities Belongs to the transthyretin family.

Domain Each monomer has two 4-stranded beta sheets and the shape of a prolate ellipsoid. Antiparallel beta-sheet interactions link monomers into dimers. A short loop from each monomer forms the main dimer-dimer interaction. These two pairs of loops separate the opposed, convex beta-sheets of the dimers to form an internal channel.

Cellular localization Secreted. Cytoplasm.

Images



Immunoprecipitation - Anti-Prealbumin antibody [EPR20971] - BSA and Azide free (ab230828)

Prealbumin was immunoprecipitated from 0.35 mg of mouse plasma with **ab215202** at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab215202** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/5000 dilution.

Lane 1: Mouse plasma 10 µg (Input).

Lane 2: **ab215202** IP in mouse plasma.

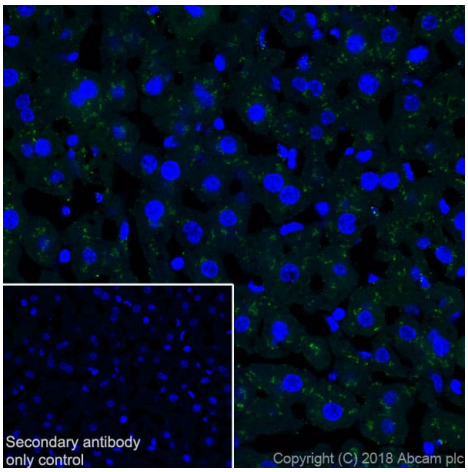
Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab215202** in mouse plasma.

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

Exposure time: 15 seconds.

The band shown at 30 kDa is likely to be a dimer of Prealbumin based on the literature (PMID: 19279259).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab215202**).



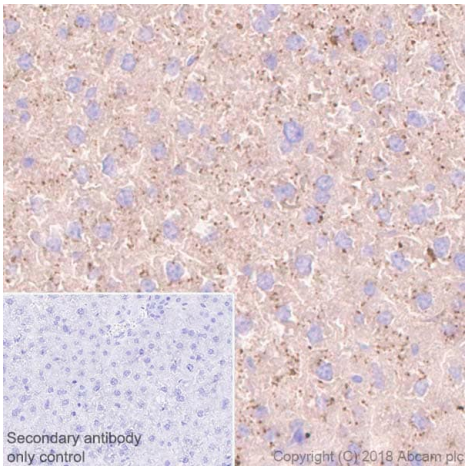
Immunohistochemistry (Frozen sections) - Anti-Prealbumin antibody [EPR20971] - BSA and Azide free (ab230828)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse liver tissue labeling Prealbumin with **ab215202** at 1/10000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Positive cytoplasmic staining in the hepatic cells of mouse liver tissue section (PMID: 25519307).

The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody 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 (**ab215202**).



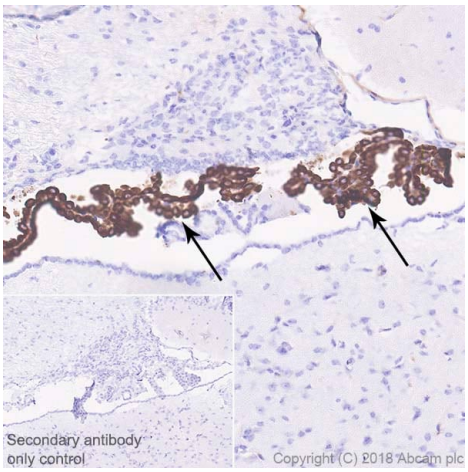
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prealbumin antibody [EPR20971] - BSA and Azide free (ab230828)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling Prealbumin with **ab215202** at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), Ready to use. Cytoplasmic staining in mouse liver (PMID: 25519307; PMID: 19032346). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP), Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab215202**).

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



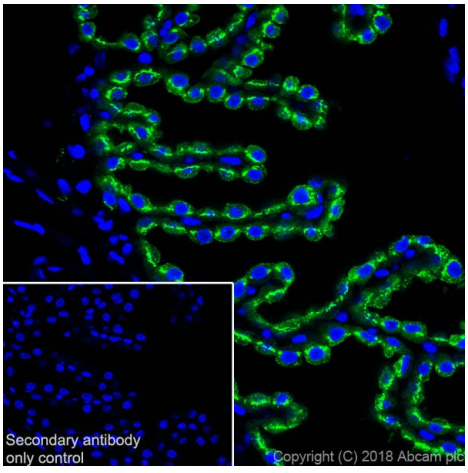
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prealbumin antibody [EPR20971] - BSA and Azide free (ab230828)

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling Prealbumin with **ab215202** at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), Ready to use. Cytoplasmic staining in choroid plexuses (arrows) of mouse cerebrum (PMID: 25758461; PMID: 19032346). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP), Ready to use.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab215202**).

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



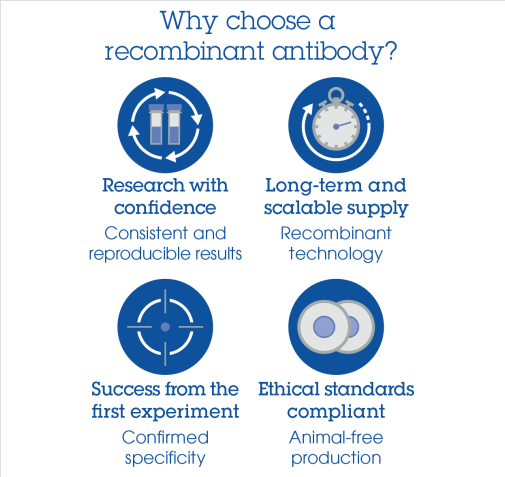
Immunohistochemistry (Frozen sections) - Anti-Prealbumin antibody [EPR20971] - BSA and Azide free (ab230828)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse brain (choroid plexus) tissue labeling Prealbumin with **ab215202** at 1/10000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Positive cytoplasmic staining in the endothelial cells of choroid plexus, negative staining in the endothelial cells of blood vessels on mouse brain tissue section (PMID: 19539719; 20462362).

The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (**ab150077**) secondary antibody 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 (**ab215202**).



Anti-Prealbumin antibody [EPR20971] - BSA and Azide free (ab230828)

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