abcam

Product datasheet

Anti-ATP7b antibody [EPR6794] (PE) ab211985

Recombinant RabMAb

1 Image

Overview

Product name	Anti-ATP7b antibody [EPR6794] (PE)
Description	Rabbit monoclonal [EPR6794] to ATP7b (PE)
Host species	Rabbit
Conjugation	PE. Ex: 488nm, Em: 575nm
Tested applications	**Suitable for:** Flow Cyt
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide within Human ATP7b aa 1450 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: P35670
Positive control	Flow Cytometry: HepG2 cells
General notes	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. Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough. Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility. We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee. In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for. We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot. Store at +4°C. Do Not Freeze. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA
Purity	Immunogen affinity purified
Clonality	Monoclonal
Clone number	EPR6794
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab211985** in the following tested applications.

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

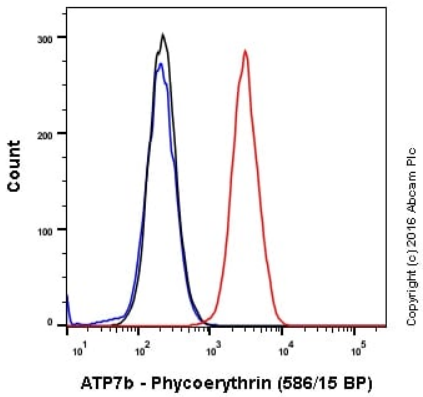
Application	Abreviews	Notes
Flow Cyt		1/1000. The cellular localisation of this product has been verified in ICC/IF.

Target

Function	Involved in the export of copper out of the cells, such as the efflux of hepatic copper into the bile.
Tissue specificity	Most abundant in liver and kidney and also found in brain. Isoform 2 is expressed in brain but not in liver. The cleaved form WND/140 kDa is found in liver cell lines and other tissues.
Involvement in disease	Defects in ATP7B are the cause of Wilson disease (WD) [MIM:277900]. WD is an autosomal recessive disorder of copper metabolism in which copper cannot be incorporated into ceruloplasmin in liver, and cannot be excreted from the liver into the bile. Copper accumulates in the liver and subsequently in the brain and kidney. The disease is characterized by neurologic manifestations and signs of cirrhosis.
Sequence similarities	Belongs to the cation transport ATPase (P-type) (TC 3.A.3) family. Type IB subfamily. Contains 6 HMA domains.
Post-translational modifications	Isoform 1 may be proteolytically cleaved at the N-terminus to produce the WND/140 kDa form.
Cellular localization	Cytoplasm; Mitochondrion and Golgi apparatus > trans-Golgi network membrane. Predominantly

found in the trans-Golgi network (TGN). Not redistributed to the plasma membrane in response to elevated copper levels.

Images



Flow Cytometry - Anti-ATP7b antibody [EPR6794] (Phycoerythrin) (ab211985)

Overlay histogram showing HepG2 cells stained with ab211985 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab211985, 1/1000 dilution) for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) Phycoerythrin (ab209478) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 50mW Yellow/Green laser (561nm) and 586/15 bandpass filter.

This antibody gave a positive signal in HepG2 cells fixed with 4% formaldehyde (10min), permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.

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