

# **Product datasheet**

# Alexa Fluor® 488 Anti-ATPB antibody [EPR11990] ab223435

Recombinant RabMAb

2 Images

Overview		
Product name	Alexa Fluor® 488 Anti-ATPB antibody [EPR11990]	
Description	Alexa Fluor® 488 Rabbit monoclonal [EPR11990] to ATPB	
Host species	Rabbit	
Conjugation	Alexa Fluor® 488. Ex: 495nm, Em: 519nm	
Tested applications	Suitable for: ICC/IF	
Species reactivity	Reacts with: Human	
	Predicted to work with: Mouse, Rat	
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.	
Positive control	ICC/IF: HeLa cells.	
General notes	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <li>High batch-to-batch consistency and reproducibility</li> <li>Improved sensitivity and specificity</li> <li>Long-term security of supply</li> <li>Animal-free production</li> <li>For more information <u>see here</u>.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb<sup>®</sup> patents</u>.</li> </ul>	
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## outlicensing@thermofisher.com.

# Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Store In the Dark.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 1% BSA, 30% Glycerol (glycerin, glycerine), PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR11990
lsotype	lgG

## Applications

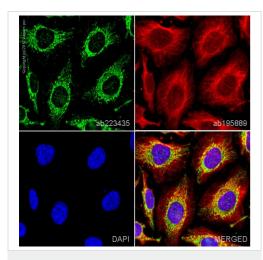
The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab223435 in the following tested applications.

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

Application	Abreviews	Notes
ICC/IF		1/100.

Target	
Function	Mitochondrial membrane ATP synthase ( $F(1)F(0)$ ATP synthase or Complex V) produces ATP from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, $F(1)$ - containing the extramembraneous catalytic core, and $F(0)$ - containing the membrane proton channel, linked together by a central stalk and a peripheral stalk. During catalysis, ATP synthesis in the catalytic domain of $F(1)$ is coupled via a rotary mechanism of the central stalk subunits to proton translocation. Subunits alpha and beta form the catalytic core in $F(1)$ . Rotation of the central stalk against the surrounding alpha(3)beta(3) subunits leads to hydrolysis of ATP in three separate catalytic sites on the beta subunits.
Sequence similarities	Belongs to the ATPase alpha/beta chains family.
Cellular localization	Mitochondrion. Mitochondrion inner membrane. Peripheral membrane protein.

#### Images



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 488 Anti-ATPB antibody [EPR11990] (ab223435) ab223435 staining ATPB in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab223435 at 1/100 dilution (shown in Green) and **ab195889**, Mouse monoclonal to alpha Tubulin (Alexa Fluor® 594), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).

This product also gave a positive signal under the same testing conditions in HeLa cells fixed with 4% formaldehyde (10 min).



(ab223435)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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