

Product datasheet

Anti-ATP5A antibody [EPR13030(B)] ab176569

Recombinant RabMAb

★★★★★ [4 Abreviews](#) [18 References](#) [12 Images](#)

Overview

Product name	Anti-ATP5A antibody [EPR13030(B)]
Description	Rabbit monoclonal [EPR13030(B)] to ATP5A
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), ICC/IF, IHC-P, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide within Human ATP5A aa 200-300 (Cysteine residue). The exact sequence is proprietary. Isoform 1 Database link: P25705
Positive control	HepG2, HeLa, fetal liver and fetal lung lysates; Human liver and fetal heart tissues; HeLa and MCF7 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p>

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 long term. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide

	Constituents: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR13030(B)
Isotype	IgG

Applications

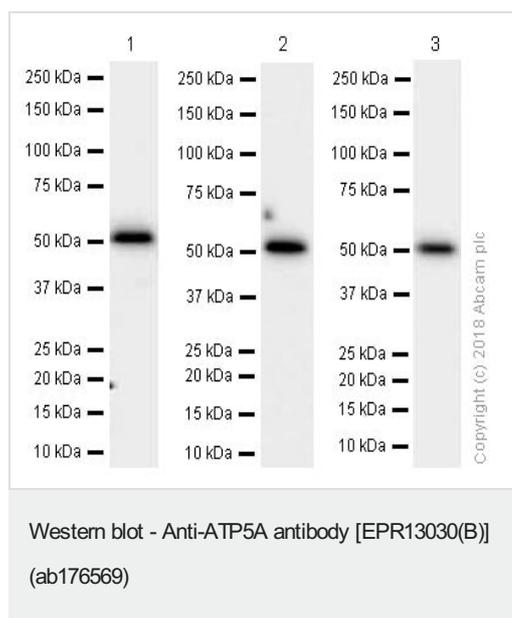
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab176569 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★ (1)	1/100 - 1/250.
IHC-P		1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See IHC antigen retrieval protocols . For unpurified use at 1/50 - 1/100. The use of an HRP/AP polymerized secondary antibody is recommended.
WB	★★★★★ (3)	1/1000 - 1/10000. Predicted molecular weight: 60 kDa.

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. Subunit alpha does not bear the catalytic high-affinity ATP-binding sites.
Tissue specificity	Fetal lung, heart, liver, gut and kidney. Expressed at higher levels in the fetal brain, retina and spinal cord.
Sequence similarities	Belongs to the ATPase alpha/beta chains family.
Post-translational modifications	The N-terminus is blocked.
Cellular localization	Mitochondrion inner membrane. Peripheral membrane protein.

Images



All lanes : Anti-ATP5A antibody [EPR13030(B)] (ab176569) at 0.01 µg/ml

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2 : Mouse brain lysates

Lane 3 : Rat brain lysates

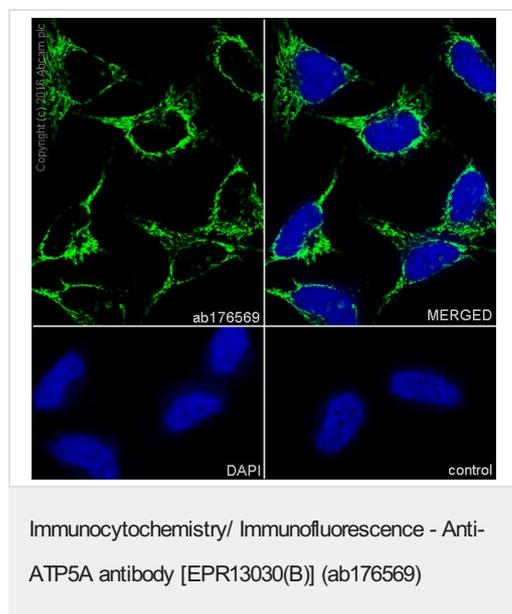
Lysates/proteins at 15 µg per lane.

Secondary

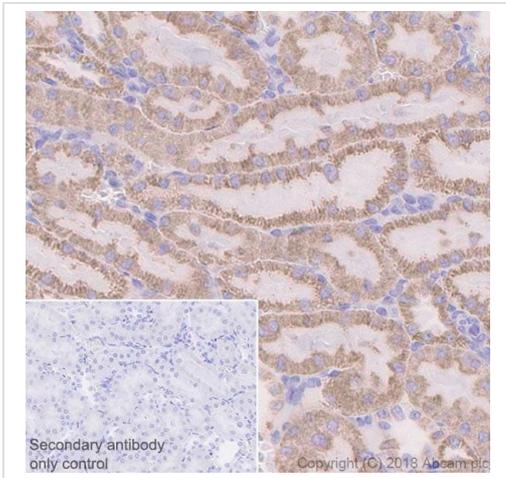
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

Predicted band size: 60 kDa

Blocking and diluting buffer: 5% NFD/MTBST

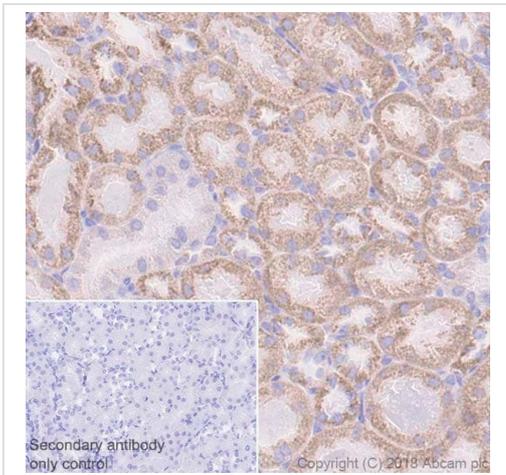


Ab176569 (purified) staining ATP5A in HeLa (human cervix adenocarcinoma epithelial cell) by Immunocytochemistry/Immunofluorescence (ICC/IF). Cells were fixed with 4% paraformaldehyde and permeabilized in 0.1% TritonX-100. Samples were incubated with primary antibody at 1/500 dilution (4.2µg/ml). An AlexaFluor®488 Goat anti-Rabbit ([ab150077](#)) was used as a secondary antibody at 1/1000 dilution (2µg/ml). DAPI was used as a nuclear counterstain. Confocal image showing cytoplasmic staining in HeLa cells.



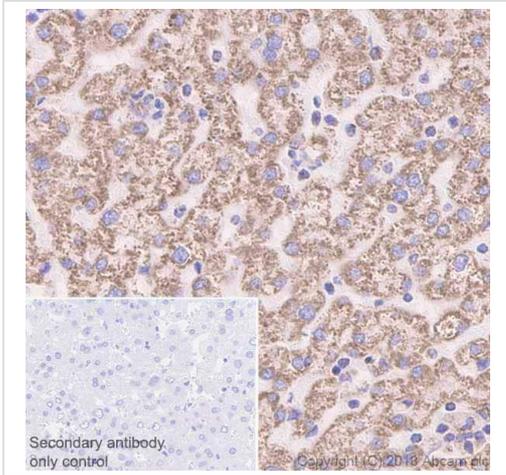
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat kidney tissue sections labeling ATP5A with Purified ab176569 at 1:500 dilution (0.21 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATP5A antibody [EPR13030(B)] (ab176569)



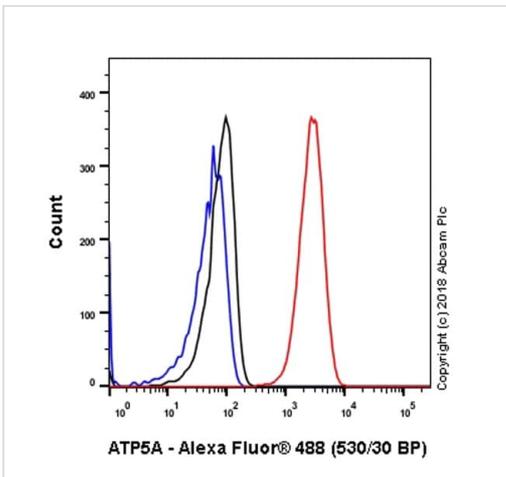
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Mouse kidney tissue sections labeling ATP5A with Purified ab176569 at 1:500 dilution (0.21 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATP5A antibody [EPR13030(B)] (ab176569)



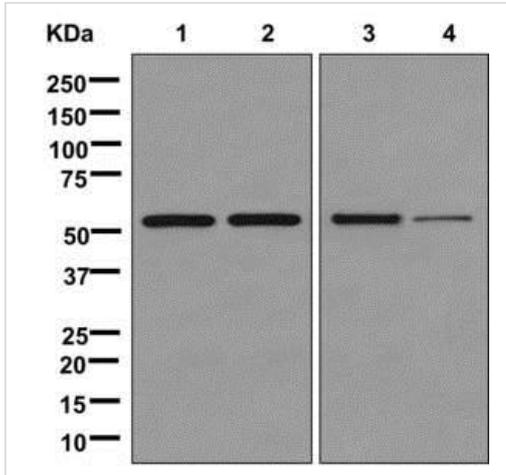
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human liver tissue sections labeling ATP5A with Purified ab176569 at 1:500 dilution (0.21 $\mu\text{g/ml}$). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATP5A antibody [EPR13030(B)] (ab176569)



Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling ATP5A with purified ab176569 at 1/60 dilution (10 $\mu\text{g/ml}$) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor[®] 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).

Flow Cytometry (Intracellular) - Anti-ATP5A antibody [EPR13030(B)] (ab176569)



Western blot - Anti-ATP5A antibody [EPR13030(B)] (ab176569)

All lanes : Anti-ATP5A antibody [EPR13030(B)] (ab176569) at 1/1000 dilution (unpurified)

Lane 1 : HepG2 cell lysate

Lane 2 : HeLa cell lysate

Lane 3 : Human fetal liver lysate

Lane 4 : Human fetal lung lysate

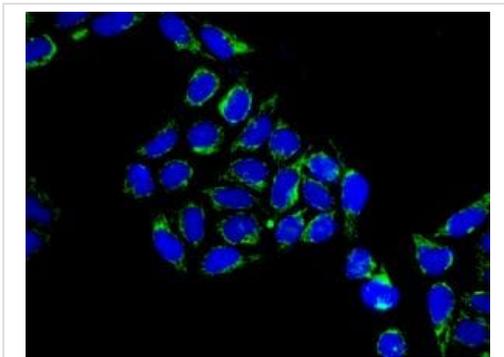
Lysates/proteins at 10 μ g per lane.

Secondary

All lanes : Goat anti-rabbit HRP at 1/2000 dilution

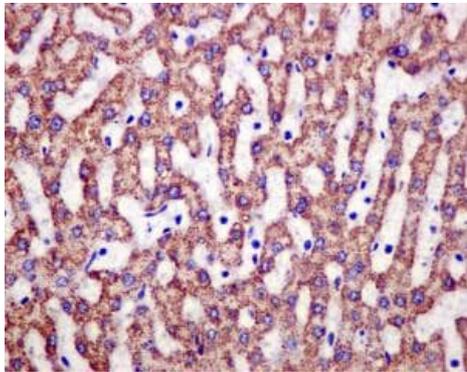
Developed using the ECL technique.

Predicted band size: 60 kDa



Immunocytochemistry/ Immunofluorescence - Anti-ATP5A antibody [EPR13030(B)] (ab176569)

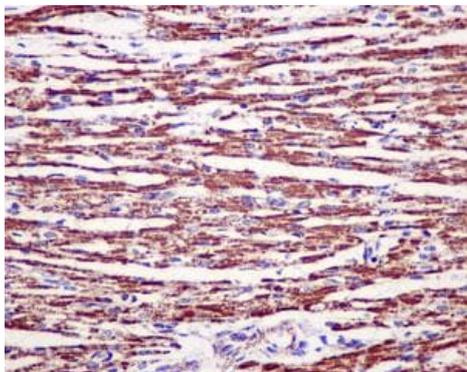
Immunofluorescence analysis of MCF7 cells labeling ATP5A using ab176569 (unpurified) at a 1/100 dilution (green). DAPI nuclear staining (blue).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATP5A antibody [EPR13030(B)] (ab176569)

Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling ATP5A using ab176569 (unpurified) at a 1/50 dilution.

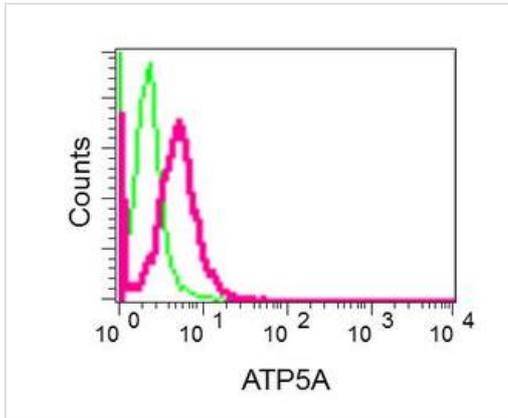
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATP5A antibody [EPR13030(B)] (ab176569)

Immunohistochemical analysis of paraffin-embedded Human fetal heart tissue labeling ATP5A using ab176569 (unpurified) at a 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Intracellular flow cytometric analysis of permeabilized HeLa cells labeling ATP5A using ab176569 (unpurified) at a 1/10 dilution (red) or a rabbit IgG negative control (green).

Flow Cytometry (Intracellular) - Anti-ATP5A antibody [EPR13030(B)] (ab176569)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-ATP5A antibody [EPR13030(B)] (ab176569)

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