


Anti-ATPB antibody [3D5] - Mitochondrial Marker ab14730

★★★★★ [41 Abreviews](#) [229 References](#) [6 图像](#)

概述

产品名称	Anti-ATPB抗体[3D5] - Mitochondrial Marker
描述	小鼠单克隆抗体[3D5] to ATPB - Mitochondrial Marker
宿主	Mouse
特异性	Human and Bovine complex V beta subunit (ATPB).
经测试应用	适用于: WB, ICC/IF, Flow Cyt, IHC-P
种属反应性	与反应: Mouse, Rat, Cow, Human, Caenorhabditis elegans 预测可用于: Goat, Cat, Dog, Pig, Common marmoset 
免疫原	Tissue, cells or virus corresponding to Human ATPB.
常规说明	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact orders@abcam.com.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>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, along with publications, customer reviews and Q&As</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.4 Preservative: 0.02% Sodium azide Constituent: HEPES buffered saline
纯度	IgG fraction
纯化说明	Near homogeneity as judged by SDS-PAGE. The antibody was produced in vitro using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.
克隆	单克隆

克隆编号	3D5
同种型	IgG1
轻链类型	kappa

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab14730于以下的经测试应用

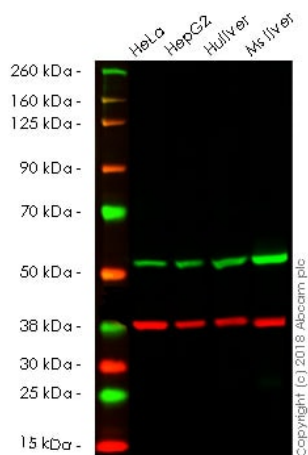
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★★ (14)	Use a concentration of 0.5 µg/ml. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).
ICC/IF	★★★★★ (8)	Use a concentration of 1 - 2 µg/ml.
Flow Cyt		Use a concentration of 1 µg/ml. ab170190 - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
IHC-P	★★★★★ (10)	Use at an assay dependent concentration.

靶标

功能	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.
序列相似性	Belongs to the ATPase alpha/beta chains family.
细胞定位	Mitochondrion. Mitochondrion inner membrane. Peripheral membrane protein.

图片



Western blot - Anti-ATPB antibody [3D5] -
Mitochondrial Marker (ab14730)

All lanes :

Lane 1 : HeLa

Lane 2 : HepG2

Lane 3 : Hu liver

Lane 4 : Ms liver

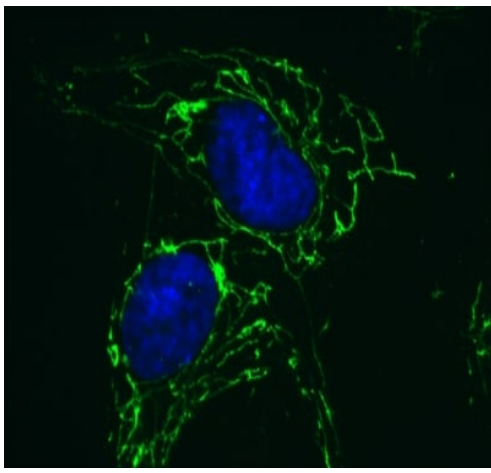
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 52 kDa

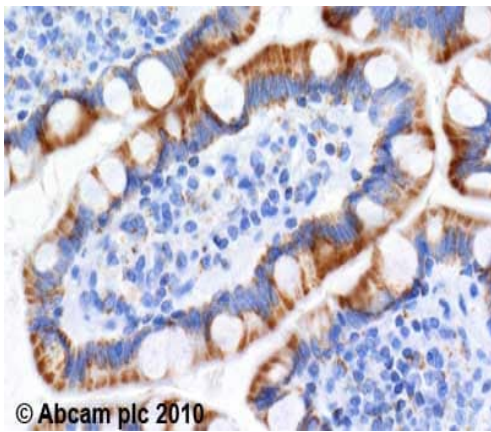
Merged signal (red and green). Green - ab14730 observed at 52 kDa. Red - loading control, **ab181602** observed at 37 kDa.

Samples were subjected to SDS-PAGE. ab14730 and **ab181602** (Rabbit anti-GAPDH loading control) were incubated overnight at 4°C at 1 µg/mL and 1/10000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (**ab216772**) and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (**ab216777**) secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



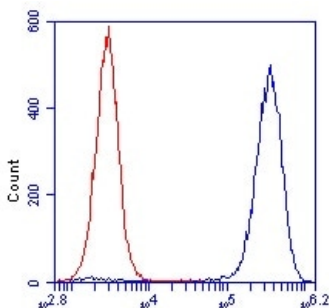
Immunocytochemistry/ Immunofluorescence - Anti-ATPB antibody [3D5] - Mitochondrial Marker (ab14730)

ab14730 staining ATPB in cultured human fibroblasts. Cells were fixed, permeabilized and then labelled with ab14730 followed by an AlexaFluor® 488-conjugated Goat anti-Mouse IgG1-specific secondary antibody (2 µg/ml)



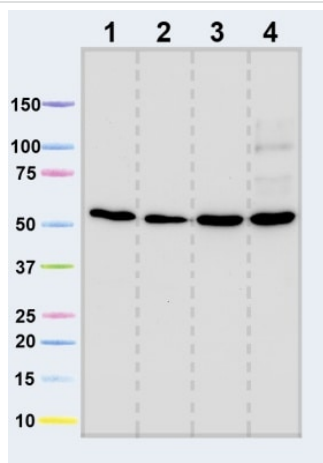
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ATPB antibody [3D5] - Mitochondrial Marker (ab14730)

ab14730 (2µg/ml) staining ATPB in human duodenum using an automated system (DAKO Autostainer Plus). Using this protocol there is cytoplasmic and mitochondrial staining of epithelium. Sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffer EDTA pH 9.0 in a DAKO PT link. Slides were peroxidase blocked in 3% H₂O₂ in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako Envision Flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that, for manual staining, optimization of primary antibody concentration and incubation time is recommended. Signal amplification may be required.



Flow Cytometry - Anti-ATPB antibody [3D5] - Mitochondrial Marker (ab14730)

ab14730 (blue) at 1µg/ml staining ATPB in HL-60 cells and analyzed by Flow cytometry. Red histogram represents equal quantity of isotype control.



Western blot - Anti-ATPB antibody [3D5] - Mitochondrial Marker (ab14730)

All lanes : Anti-ATPB antibody [3D5] - Mitochondrial Marker (ab14730)

Lane 1 : isolated mitochondria from human heart at 5 µg

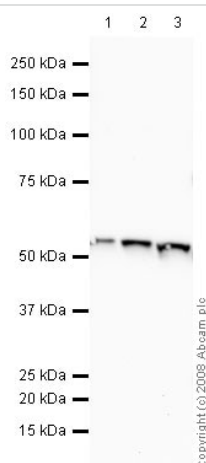
Lane 2 : isolated mitochondria from bovine heart at 1 µg

Lane 3 : isolated mitochondria from rat heart at 10 µg

Lane 4 : isolated mitochondria from mouse heart at 10 µg

Predicted band size: 52 kDa

Observed band size: 52 kDa



Western blot - Anti-ATPB antibody [3D5] - Mitochondrial Marker (ab14730)

All lanes : Anti-ATPB antibody [3D5] - Mitochondrial Marker (ab14730) at 0.8 µg/ml

Lane 1 : HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

Lane 2 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

Lane 3 : Human liver tissue lysate - total protein ([ab29889](#))

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Predicted band size: 52 kDa

Observed band size: 52 kDa

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