# abcam

# Product datasheet

# Anti-ATP5O antibody [4C11C10D12] ab110276

★★★★★ 1 Abreviews 23 References 6 图像

#### 概述

产**品名称** Anti-ATP5O抗体[4C11C10D12]

**小**鼠单**克隆抗体**[4C11C10D12] to ATP5O

**宿主** Mouse

特异性 Antigen retrieval is required for ICC. Immediately before the permeabilization step, heat the

coverslips for 10 minutes in 100mM Tris, 5% urea, pH 9.5 at 95°C for 10 minutes.

经测试应用 适用于: ICC/IF, WB, Flow Cyt, IHC-P

种属反应性 与反应: Cow, Human, African green monkey

不与反应: Mouse, Rat

免疫原 Recombinant full length protein. This information is considered to be commercially sensitive.

阳性对照 Isolated mitochondria from Human heart and Bovine heart, Cultured Human embryonic lung-

derived fibroblasts (strain MRC5), Human colon tissue, HL-60 cells WB: Recombinant Human

ATP50 protein (ab104549) cell lysate.

常规说明

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact orders@abcam.com.

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.

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

Product was previously marketed under the MitoSciences sub-brand.

#### 性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at +4°C. Do Not Freeze.

**存储溶液** pH: 7.5

Preservative: 0.02% Sodium azide Constituent: HEPES buffered saline

1

纯**度** IgG fraction

纯**化**说明 Near homogeneity as judged by SDS-PAGE. ab110276 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** 4C11C10D12

同种型 lgG1 轻链类型 kappa

#### 应用

## The Abpromise guarantee Abpromise™承诺保证使用ab110276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
ICC/IF		Use a concentration of 0.5 - 1 µg/ml.  Perform heat-induced antigen-retrieval with 100mM Tris, 5% urea, pH 9.5 at 95°C for 10 minutes immediately before permeabilization.
WB		Use a concentration of 0.5 µg/ml. Predicted molecular weight: 23 kDa.
Flow Cyt		Use a concentration of 1 $\mu$ g/ml. <u>ab170190</u> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
IHC-P		1/500.

# 靶标

功能 Mitochondrial membrane ATP synthase (F(1)F(0) ATP synthase or Complex V) produces ATP

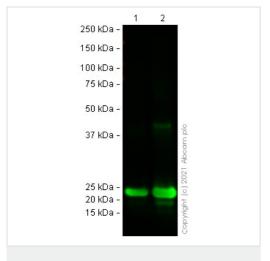
from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, F(1) - containing the extramembraneous catalytic core and F(0) - containing the membrane proton channel, linked 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. Part of the complex F(0) domain and the peripheric stalk, which acts as a stator to hold the catalytic alpha(3)beta(3) subcomplex and subunit a/ATP6

static relative to the rotary elements.

序列相似性 Belongs to the ATPase delta chain family.

细**胞定位** Mitochondrion, Mitochondrion inner membrane.

# 图片



Western blot - Anti-ATP5O antibody [4C11C10D12] (ab110276)

All lanes : Anti-ATP5O antibody [4C11C10D12] (ab110276) at 1  $\mu g/ml$ 

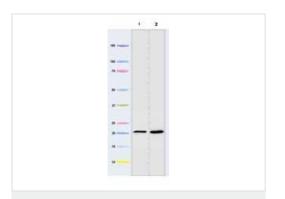
Lane 1 : Recombinant Human ATP50 protein (<u>ab104549</u>) cell lysate at 0.1 µg

**Lane 2 :** Recombinant Human ATP5O protein ( $\underline{ab104549}$ ) cell lysate at 0.5  $\mu g$ 

Performed under reducing conditions.

Predicted band size: 23 kDa Observed band size: 24 kDa

False colour image of Western blot: Anti-ATP5O antibody
[4C11C10D12] staining at 1 ug/ml, shown in green. In Western blot, ab110276 was shown to bind specifically to ATP5O. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed (ab216772) at 1/20000 dilution.

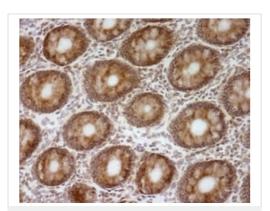


Western blot - Anti-ATP5O antibody [4C11C10D12] (ab110276)

All lanes : Anti-ATP5O antibody [4C11C10D12] (ab110276) at 0.5  $\mu g/ml$ 

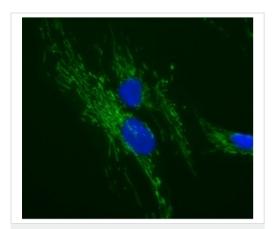
**Lane 1 :** Human heart mitochondria at 5 μg **Lane 2 :** Bovine heart mitochondria at 1 μg

Predicted band size: 23 kDa



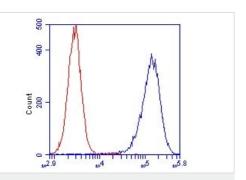
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ATP5O antibody
[4C11C10D12] (ab110276)

Human colon tissue fixed with 4% PFA and antibody detection with ab110276 using the ABC system. ab110276 diluted 1/500 and incubated for 1 hour. Sections were incubated in peroxidase-conjugated rabbit anti-mouse immunoglobulins (diluted 1/100 in 4% BSA in PBST) for 1 hour at room temp.



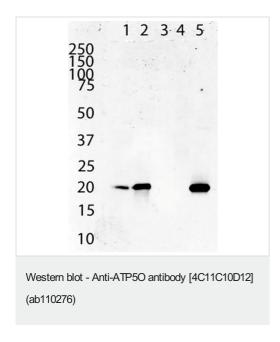
Immunocytochemistry/ Immunofluorescence - Anti-ATP5O antibody [4C11C10D12] (ab110276)

Mitochondrial localization of ATP5O. Cultured Human embryonic lung-derived fibroblasts (strain MRC5) were fixed, treated for heat-induced antigen retrieval, permeabilized and then labeled with ab110276 (0.5  $\mu g/ml$ ) followed by an AlexaFluor® 488-conjugated-goat-anti-mouse lgG1 isotype specific secondary antibody (2  $\mu g/ml$ ).



Flow Cytometry - Anti-ATP5O antibody [4C11C10D12] (ab110276)

HL-60 cells were stained with 1  $\mu$ g/mL ab110276 (blue) or an equal amount of an isotype control antibody (red) and analyzed by flow cytometry.



All lanes : Anti-ATP5O antibody [4C11C10D12] (ab110276) at 1  $\mu$ g/ml

Lane 1: HDFn (human) cell lysates at 20 µg

Lane 2: COS7 (monkey) cell lysates at 20 µg

Lane 3: H4IIE (rat) cell lysates at 20 µg

Lane 4: MEF (mouse) cell lysates at 20 µg

Lane 5: bovine heart mitochondria lysates at 5 µg

Predicted band size: 23 kDa

Secondary antibody: Goat-Anti-Mouse-IR800 1:4000

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.cn/abpromise">https://www.abcam.cn/abpromise</a> or contact our technical team.

### Terms and conditions

· Guarantee only valid for products bought direct from Abcam or one of our authorized distributors