abcam

Product datasheet

Anti-ATP5O antibody [4C11C10D12] ab110276

★★★★★ 1 Abreviews 23 References 画像数 6

製品の概要

製品名 Anti-ATP5O antibody [4C11C10D12]

製品の詳細 Mouse monoclonal [4C11C10D12] to ATP50

由来種 Mouse

特異性 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.

アプリケーション 適用あり: ICC/IF, WB, Flow Cyt, IHC-P

種交差性 交差種: Cow, Human, African green monkey

非交差種: Mouse, Rat

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

ポジティブ・コントロール 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

ATP5O protein (ab104549) cell lysate.

特記事項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.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.5

Preservative: 0.02% Sodium azide Constituent: HEPES buffered saline

1

精製度 IgG fraction

特記事項(精製) 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.

ポリ/モノ モノクローナル **クローン名** 4C11C10D12

アイソタイプ lgG1

軽鎖の種類 kappa

アプリケーション

The Abpromise guarantee Abpromise保証は、次のテスト済みアプリケーションにおけるab110276の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
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 $\mu g/ml$. Predicted molecular weight: 23 kDa.
Flow Cyt		Use a concentration of 1 µg/ml. ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
IHC-P		1/500.

ターゲット情報

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

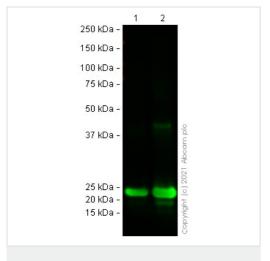
from ADP in the presence of a proton gradient across the membrane which is generated by electron transport complexes of the respiratory chain. F-type ATPases consist of two structural domains, F(1) - containing the extramembraneous catalytic core and F(0) - containing the membrane proton channel, linked 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.

配列類似性 Belongs to the ATPase delta chain family.

細胞内局在 Mitochondrion, Mitochondrion inner membrane.

画像



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

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

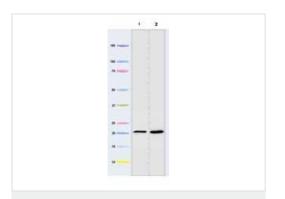
Lane 1 : Recombinant Human ATP50 protein (<u>ab104549</u>) cell lysate at 0.1 µg

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

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.

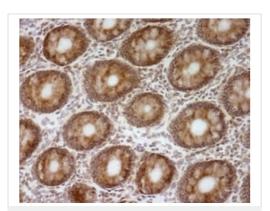


Western blot - Anti-ATP5O antibody [4C11C10D12] (ab110276)

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

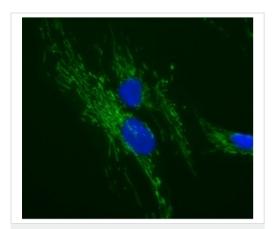
Lane 1 : Human heart mitochondria at 5 μg **Lane 2 :** Bovine heart mitochondria at 1 μg

Predicted band size: 23 kDa



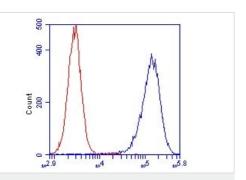
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ATP5O antibody
[4C11C10D12] (ab110276)

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.



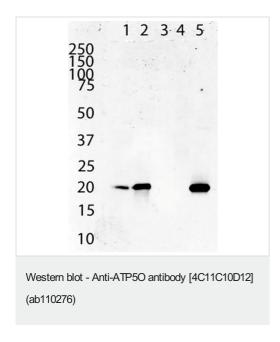
Immunocytochemistry/ Immunofluorescence - Anti-ATP5O antibody [4C11C10D12] (ab110276)

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 μ 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"

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