abcam

Product datasheet

Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker ab33985

★★★★★ 25 Abreviews 109 References 7 图像

概述

产品名称 Anti-COX IV抗体[mAbcam33985] - Mitochondrial Marker

描述 小鼠单克隆抗体[mAbcam33985] to COX Ⅳ - Mitochondrial Marker

宿主 Mouse

经测试应用 适用于: WB, Flow Cyt (Intra), ICC/IF

种属反应性 与反应: Mouse, Cow, Human, Xenopus laevis

预测可用于: Rat, Sheep, Chimpanzee, Monkey, Zebrafish, African green monkey, Chinese

hamster, Drosophila C virus

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Jurkat and HepG2 whole cell lysates and human skeletal muscle, mouse skeletal muscle and

cow kidney tissue lysates. ICC/IF: HeLa cells; Flow Cyt (Intra): HeLa cells.

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

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: 7.40

Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine

纯**度** Protein G purified

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克隆 单克隆

克隆编号 mAbcam33985

骨髓瘤 Sp2 **同种型** IgG1

应用

The Abpromise guarantee Abpromise™承诺保证使用ab33985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	**** (13)	Use a concentration of 1 µg/ml. Detects a band of approximately 15 kDa (predicted molecular weight: 15 kDa).
Flow Cyt (Intra)		Use 1µg for 10 ⁶ cells. ab170190 - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★ ★ (9)	Use a concentration of 1 µg/ml.

靶标

功能 This protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal

oxidase in mitochondrial electron transport.

组织特异性 Ubiquitous.

序列相似性 Belongs to the cytochrome c oxidase IV family.

细**胞定位** Mitochondrion inner membrane.

图片



Western blot - Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker (ab33985)

All lanes : Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker (ab33985) at 1 μ g/ml

Lane 1 : Jurkat (Human T cell lymphoblast-like cell line) Whole Cell Lysate

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

Lane 3 : Human skeletal muscle tissue lysate - total protein (ab29330)

Lane 4 : Skeletal Muscle (Mouse) Tissue Lysate
Lane 5 : Kidney (Cow) Tissue Lysate (ab29073)

Lysates/proteins at 10 µg per lane.

Secondary

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

Developed using the ECL technique.

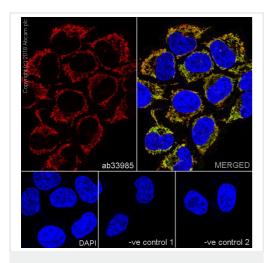
Performed under reducing conditions.

Predicted band size: 15 kDa **Observed band size:** 15 kDa

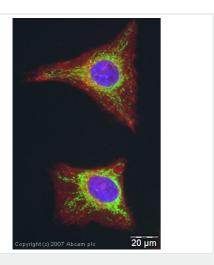
Exposure time: 1 minute

Ab33985 staining COX IV in HeLa (Human cervix adenocarcinoma epithelial cell) cells by ICC/IF

(Immunocytochemistry/Immunofluorescence). Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% TritonX-100. Samples were incubated with primary antibody at 1:1000 dilution (1μg/ml). An Alexa Fluor[®]594 Goat anti-mouse (**ab150120**) was used as a secondary antibody at 1:1000 dilution (2 μg/ml). Cells were counterstained with anti-Cyclophilin F (**ab231155**, 5.5μg/ml) and AlexaFluor[®]488 Goat anti-Rabbit (**ab150077**, 2μg/ml). DAPI was used as a nuclear counterstain. Ab33985 was used for negative control 1 at 1:1000 dilution (1μg/ml). For negative control 2, **ab231155** was used at a 1:100 dilution (5.5μg/ml) and **ab150129** was used as a secondary antibody at 1:1000 dilution (2μg/ml). Confocal image showing mitochondrial staining in HeLa cell line.

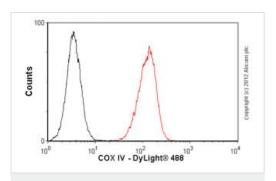


Immunocytochemistry/ Immunofluorescence - Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker (ab33985)



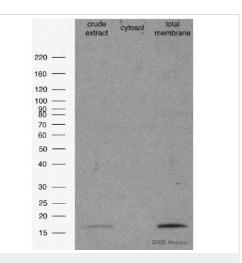
Immunocytochemistry/ Immunofluorescence - Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker (ab33985)

ICC/IF image of ab33985 stained human HeLa cells. The cells were PFA fixed (10 min), permabilised in TBS-T (20 min) and incubated with the antibody (ab33985, 1µg/ml) for 1h at room temperature. 1%BSA / 10% normal serum / 0.3M glycine was used to quench autofluorescence and block non-specific protein-protein interactions. The secondary antibody (green) was Alexa Fluor[®] 488 goat anti-mouse IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor[®] 594 WGA was used to label plasma membranes (red). DAPI was used to stain the cell nuclei (blue).



Flow Cytometry (Intracellular) - Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker (ab33985)

Overlay histogram showing HeLa cells stained with ab33985 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab33985, 1µg/1x10 6 cells) for 30 min at 22 $^\circ$ C. The secondary antibody used was DyLight $^\circ$ 488 goat anti-mouse IgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22 $^\circ$ C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (ab91353, 2µg/1x10 6 cells) used under the same conditions. Acquisition of >5,000 events was performed.



Western blot - Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker (ab33985)

This image is courtesy of an Abreview submitted by Dr Anne-Lore Schlaitz

All lanes : Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker (ab33985) at 1/1000 dilution

Lane 1: Crude extract prepared from Xenopus laevis egg

Lane 2: Cytosol lysate prepared from Xenopus laevis egg extract

Lane 3: Total membrane lysate prepared from Xenopus laevis egg extract

Extract

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : HRP conjugated donkey anti-mouse IgG at 1/4000 dilution

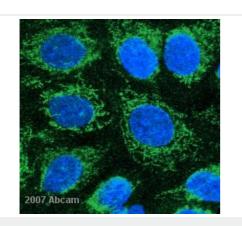
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 15 kDa **Observed band size:** 15 kDa

Exposure time: 90 minutes

ab33985 staining COX IV in human proximal tubular epithelial cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde, permeabilized with 0.5% Triton X-100 in PBS and blocked with 3% BSA for 15 minutes at 20°C. Samples were incubated with primary antibody (1/200 in PBS) for 45 minutes at 20°C. ab6785, a FITC-conjugated goat anti-mouse IgG (H+L) polyclonal was used as the secondary antibody (1/1000).



Immunocytochemistry/ Immunofluorescence - Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker (ab33985)

This image is courtesy of an anonymous Abreview

kDa 1 2 3
37 —
25 —
20 —
15 —

Western blot - Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker (ab33985)

This image is courtesy of an anonymous Abreview

All lanes : Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker (ab33985) at 1/1000 dilution

All lanes: cow liver membrane with Milk

Lysates/proteins at 15 µg per lane.

Blocking peptides at 1.5 % per lane.

Secondary

All lanes: Goat Anti-mouse IgG HRP at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 15 kDa

Exposure time: 17 hours

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