


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

★★★★★ [25 Abreviews](#) [109 References](#) [画像数 7](#)

### 製品の概要

製品名	Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker
製品の詳細	Mouse monoclonal [mAbcam33985] to COX IV - Mitochondrial Marker
由来種	Mouse
アプリケーション	<b>適用あり:</b> WB, Flow Cyt (Intra), ICC/IF
種交差性	<b>交差種:</b> Mouse, Cow, Human, Xenopus laevis <b>交差が予測される動物種:</b> 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.
ポジティブ・コントロール	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.
特記事項	<p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a>.</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&amp;As</p>

### 製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine
精製度	Protein G purified

ポリ/モノ	モノクローナル
クローン名	mAbcam33985
ミエローマ	Sp2
アイソタイプ	IgG1

## 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ab33985の使用に適用されず**  
 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
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 <sup>6</sup> cells. <b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC/IF	★★★★★ (9)	Use a concentration of 1 µg/ml.

## ターゲット情報

機能	This protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport.
組織特異性	Ubiquitous.
配列類似性	Belongs to the cytochrome c oxidase IV family.
細胞内局在	Mitochondrion inner membrane.

## 画像



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

**All lanes :** Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker (ab33985) at 1 µg/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 IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

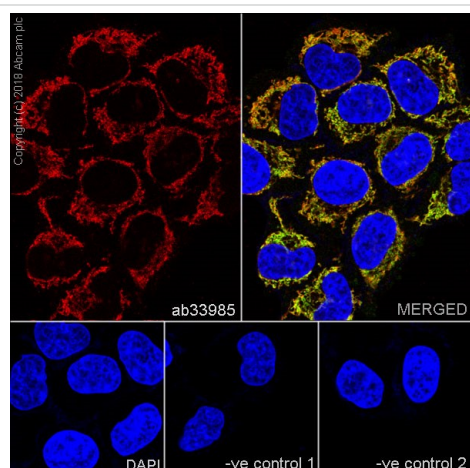
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 15 kDa

**Observed band size:** 15 kDa

**Exposure time:** 1 minute

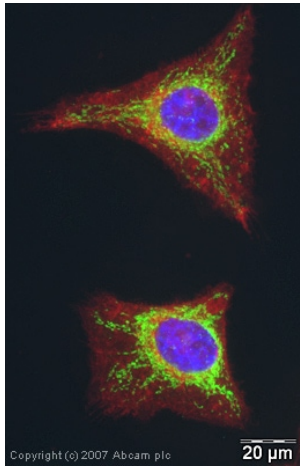


Immunocytochemistry/ Immunofluorescence - Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker (ab33985)

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

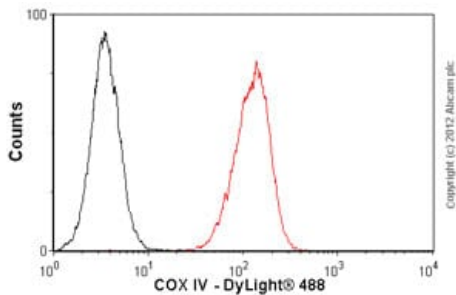
(Immunocytochemistry/Immunofluorescence). Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% TritonX-100.

Samples were incubated with primary antibody at 1:1000 dilution (1µg/ml). An Alexa Fluor<sup>®</sup>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<sup>®</sup>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.



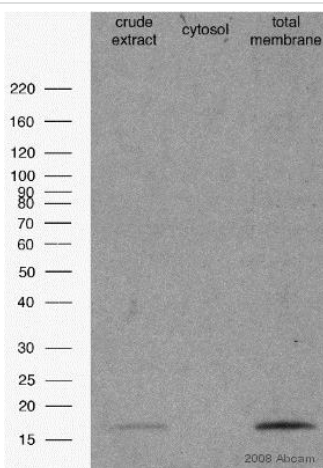
Immunocytochemistry/ Immunofluorescence - Anti-COX IV antibody [mAbcam33985] - Mitochondrial Marker (ab33985)

ICC/IF image of ab33985 stained human HeLa cells. The cells were PFA fixed (10 min), permeabilised 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<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [CIGG1] (**ab91353**, 2µg/1x10<sup>6</sup> 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

Lysates/proteins at 15 µg per lane.

### Secondary

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

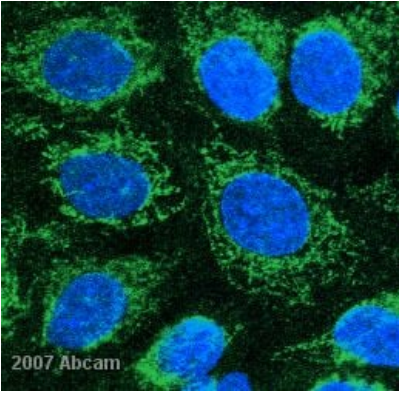
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 15 kDa

**Observed band size:** 15 kDa

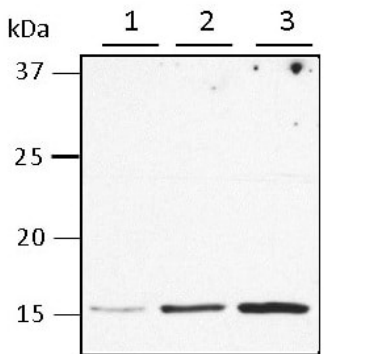
**Exposure time:** 90 minutes



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

This image is courtesy of an anonymous Abreview

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).



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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