abcam

Product datasheet

Anti-COX IV antibody - Mitochondrial Loading Control ab16056

★★★★★ 33 Abreviews 246 References 8 图像

概述

产品名称	Anti-COX IV抗体- Mitochondrial Loading Control
描述	兔多克隆抗体to COX IV - Mitochondrial Loading Control
宿主	Rabbit
经测试应用	**适用于:** IHC-Fr, WB, ICC/IF, IHC-P
种属反应性	**与反应:** Mouse, Rat, Human, Xenopus laevis, Potato, African green monkey, Chinese hamster **预测可用于:** Chimpanzee, Monkey
免疫原	Synthetic peptide corresponding to Human COX IV aa 150 to the C-terminus (C terminal) conjugated to keyhole limpet haemocyanin. (Peptide available as **ab16381**)
阳性对照	ICC/IF: HeLa cells.
常规说明	This antibody makes an effective loading control for mitochondria. COX IV is generally expressed at a consistent high level. However, be aware that many proteins run at the same 16kD size as COX IV - our VDAC1 / Porin antibody makes a good alternative mitochondrial loading control for proteins of this size. Some caution is required when using this antibody as a loading control as COXIV expression can vary under some manipulations. An alternative mitochondrial loading control is Mouse monoclonal to COX IV antibody [20E8] (**ab14744**). 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	Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

	Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
纯度	Immunogen affinity purified
Primary antibody说明	This antibody makes an effective loading control for mitochondria. COX IV is generally expressed at a consistent high level. However, be aware that many proteins run at the same 16kD size as COX IV - our VDAC1 / Porin antibody makes a good alternative mitochondrial loading control for proteins of this size. Some caution is required when using this antibody as a loading control as COXIV expression can vary under some manipulations. An alternative mitochondrial loading control is Mouse monoclonal to COX IV antibody [20E8] (**ab14744**).
克隆	**多克隆**
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab16056于以下的经测试应用**

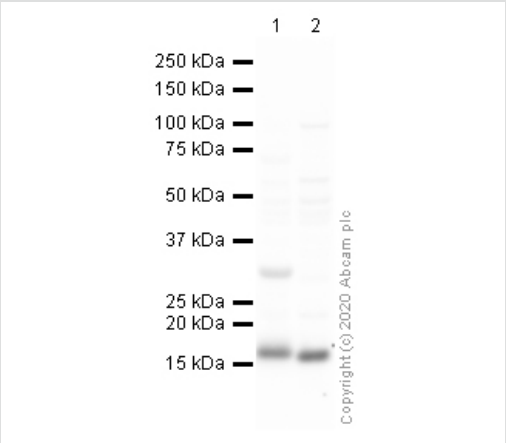
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-Fr	★★★★★ (2)	Use at an assay dependent concentration.
WB	★★★★★ (15)	Use a concentration of 0.5 µg/ml. Detects a band of approximately 15 kDa (predicted molecular weight: 17 kDa).
ICC/IF	★★★★★ (6)	Use a concentration of 1 µg/ml.
IHC-P	★★★★★ (5)	Use a concentration of 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

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 - Mitochondrial Loading Control (ab16056)

All lanes : Anti-COX IV antibody - Mitochondrial Loading Control (ab16056) at 1 µg/ml

Lane 1 : Human skeletal muscle tissue lysate
Lane 2 : Rat skeletal muscle tissue

Lysates/proteins at 10 µg per lane.

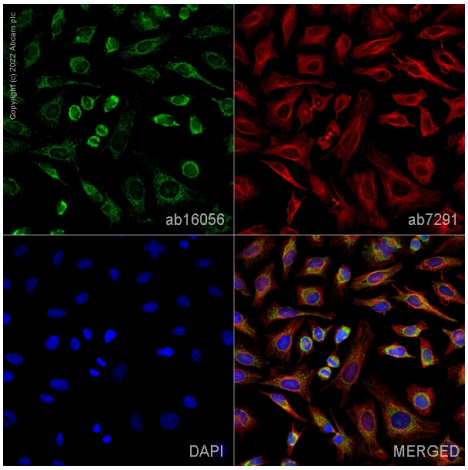
Secondary
All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/50000 dilution

Predicted band size: 17 kDa
Observed band size: 17 kDa

Blocking buffer: 2% BSA

Gel type: MES

Exposure Time: 1 minute

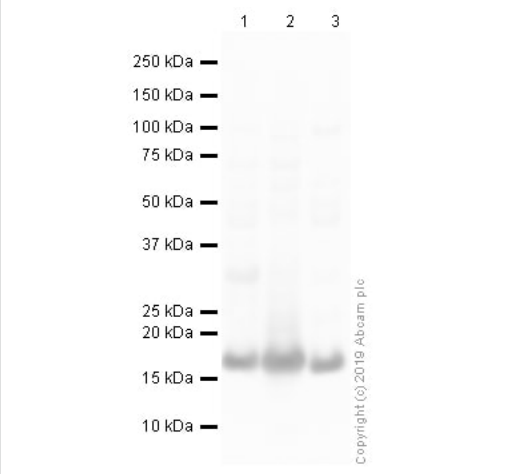


Immunocytochemistry/ Immunofluorescence - Anti-COX IV antibody - Mitochondrial Loading Control (ab16056)

ab16056 staining COX IV in HeLa cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab16056 at 1µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and **ab150120**, Goat polyclonal Secondary Antibody to Mouse IgG - H&L (Alexa Fluor® 594), pre-adsorbed at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Also suitable in cells fixed with 100% methanol (5 min).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Western blot - Anti-COX IV antibody - Mitochondrial Loading Control (ab16056)

All lanes : Anti-COX IV antibody - Mitochondrial Loading Control (ab16056) at 1 µg/ml

Lane 1 : Human skeletal muscle tissue lysate
Lane 2 : Human heart tissue lysate
Lane 3 : Mouse skeletal muscle tissue lysate

Lysates/proteins at 10 µg per lane.

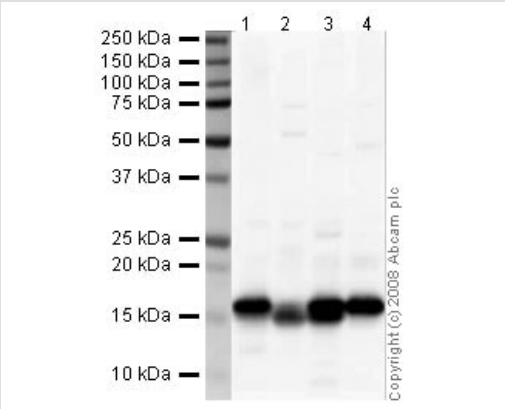
Secondary
All lanes : Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/50000 dilution

Predicted band size: 17 kDa
Observed band size: 17 kDa

Blocking buffer: 2% BSA

Gel type: MES

Exposure Time: 1 minute



Western blot - Anti-COX IV antibody - Mitochondrial Loading Control (ab16056)

All lanes : Anti-COX IV antibody - Mitochondrial Loading Control (ab16056) at 1 µg/ml

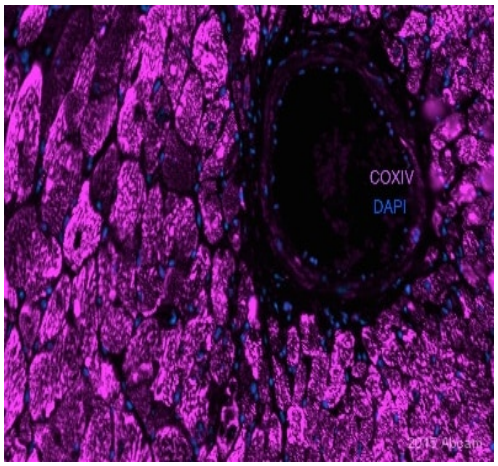
Lane 1 : Human brain tissue lysate - total protein (**ab29466**)
Lane 2 : Human liver tissue lysate - total protein (**ab29889**)
Lane 3 : Human heart tissue lysate - total protein (**ab29431**)
Lane 4 : Human skeletal muscle tissue lysate - total protein (**ab29330**)

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab7090**) at 1/3000 dilution

Performed under reducing conditions.

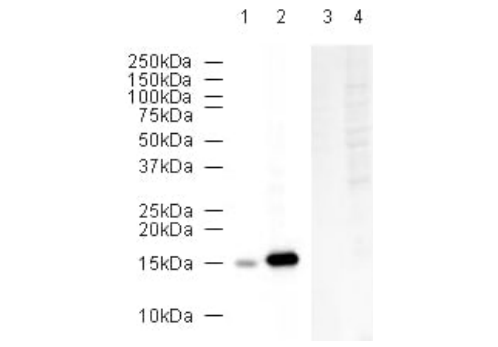
Predicted band size: 17 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX IV antibody - Mitochondrial Loading Control (ab16056)

This image is courtesy of an anonymous Abreview

ab16056 staining COX IV in Mouse heart tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and blocked with 5% serum for 1 hour at 21°C; antigen retrieval was by heat mediation in a citrate buffer. Samples were incubated with primary antibody (1/600) for 12 hours at 4°C. A Cy5® donkey anti-rabbit secondary antibody was used as the secondary antibody.



Western blot - Anti-COX IV antibody - Mitochondrial Loading Control (ab16056)

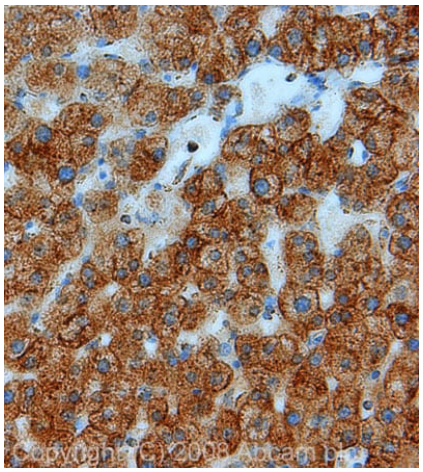
All lanes : Anti-COX IV antibody - Mitochondrial Loading Control (ab16056) at 0.38 µg/ml

Lane 1 : HeLa whole cell lysate
Lane 2 : Human skeletal muscle cell lysate
Lane 3 : HeLa whole cell lysate with Human COX IV peptide (**ab16381**) at 1 µg/ml
Lane 4 : Human skeletal muscle cell lysate with Human COX IV peptide (**ab16381**) at 1 µg/ml

Lysates/proteins at 20 µg per lane.

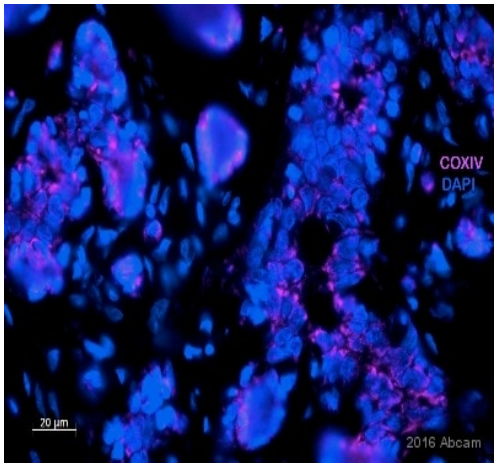
Secondary
All lanes : HRP-conjugated goat anti-rabbit IgG at 1/10000 dilution

Predicted band size: 17 kDa
Observed band size: 15 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX IV antibody - Mitochondrial Loading Control (ab16056)

IHC image of COXIV staining in human liver FFPE section, performed on a Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab16056, 1µg/ml, for 8 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-COX IV antibody - Mitochondrial Loading Control (ab16056)

This image is courtesy of an anonymous Abreview.

ab16056 staining COX IV in breast tumour tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with 10% buffered formalin and blocked with 5% serum for 60 minutes at 21°C; antigen retrieval was by heat mediation in a 10mM sodium citrate buffer pH6. Samples were incubated with primary antibody (1/300 in blocking buffer) for 12 hours at 4°C. An Alexa Fluor® 647-conjugated donkey anti-rabbit IgG polyclonal (1/200) was used as the secondary antibody.

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