abcam

Product datasheet

Anti-MTCO2 antibody [EPR3314] ab79393

重组 RabMAb

★★★★★ 2 Abreviews 30 References 6 图像

概述

产品名称	Anti-MTCO2抗体[EPR3314]
描述	兔单克隆抗体[EPR3314] to MTCO2
宿主	Rabbit
经测试应用	**适用于:** Flow Cyt (Intra), ICC/IF, WB, IP, IHC-P
种属反应性	**与反应:** Human
免疫原	Synthetic peptide within Human MTCO2 aa 200-300. The exact sequence is proprietary.
阳性对照	K562, MCF7, THP1 and HeLa cell lysates; human heart, liver and heart muscle tissues. IP: HeLa whole cell lysate.
常规说明	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.

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. Stable for 12 months at -20°C.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Tissue culture supernatant
克隆	单克隆

克隆编号	EPR3314
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab79393于以下的经测试应用**

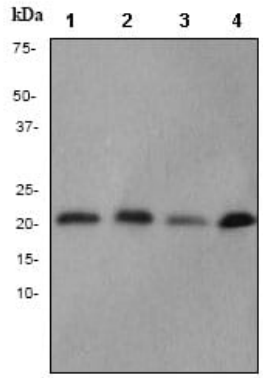
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/60. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		Use a concentration of 5 µg/ml.
WB	★★★★★ (2)	1/5000 - 1/10000. Detects a band of approximately 21 kDa (predicted molecular weight: 25 kDa).
IP		1/50.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

靶标

功能	Cytochrome c oxidase is the component of the respiratory chain that catalyzes the reduction of oxygen to water. Subunits 1-3 form the functional core of the enzyme complex. Subunit 2 transfers the electrons from cytochrome c via its binuclear copper A center to the bimetallic center of the catalytic subunit 1.
疾病相关	Defects in MT-CO2 are a cause of mitochondrial complex IV deficiency (MT-C4D) [MIM:220110]; also known as cytochrome c oxidase deficiency. A disorder of the mitochondrial respiratory chain with heterogeneous clinical manifestations, ranging from isolated myopathy to severe multisystem disease affecting several tissues and organs. Features include hypertrophic cardiomyopathy, hepatomegaly and liver dysfunction, hypotonia, muscle weakness, excercise intolerance, developmental delay, delayed motor development and mental retardation. A subset of patients manifest Leigh syndrome.
序列相似性	Belongs to the cytochrome c oxidase subunit 2 family.
细胞定位	Mitochondrion inner membrane.

图片



Western blot - Anti-MTCO2 antibody [EPR3314] (ab79393)

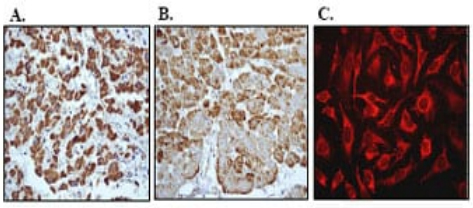
All lanes : Anti-MTCO2 antibody [EPR3314] (ab79393) at 1/10000 dilution

Lane 1 : K562 cell lysate
Lane 2 : MCF7 cell lysate
Lane 3 : THP1 cell lysate
Lane 4 : HeLa cell lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : goat anti-rabbit HRP at 1/2000 dilution

Predicted band size: 25 kDa
Observed band size: 21 kDa



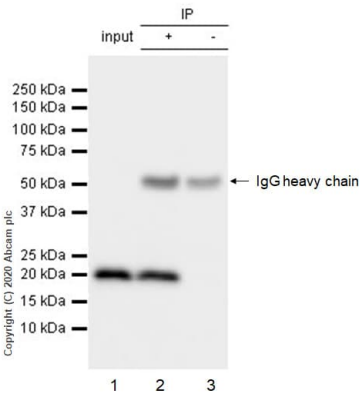
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MTCO2 antibody [EPR3314] (ab79393)

ab79393 at 1/100 dilution staining Cytochrome C oxidase subunit II in Human Liver (A), Human Heart(B) and HeLa Cell Line(C) by Immunohistochemistry, Paraffin-embedded tissues. Detection method of A and B was HRP-conjugated anti-rabbit with DAB substrate used for staining.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.

Immunocytochemistry/ Immunofluorescence - Anti-MTCO2 antibody [EPR3314] (ab79393)

ICC/IF image of ab79393 stained HepG2 cells. The cells were 100% PFA fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab79393, 5µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.



Immunoprecipitation - Anti-MTCO2 antibody [EPR3314] (ab79393)

Purified ab79393 at 1/50 dilution (2µg) immunoprecipitating MTCO2 in HeLa whole cell lysate.

Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): ab79393 + HeLa whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab79393 in HeLa whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (**ab131366**) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 21 kDa

Flow Cytometry (Intracellular) - Anti-MTCO2 antibody [EPR3314] (ab79393)

Overlay histogram showing HepG2 cells stained with ab79393 (red line). The cells were fixed with 4% paraformaldehyde (10 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 (ab79393, 1/50 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit IgG (H+L) (**ab96899**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.

Anti-MTCO2 antibody [EPR3314] (ab79393)

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