abcam

Product datasheet

Anti-MTCO2 antibody [EPR3314] ab79393

יולצעבע RabMAb

★★★★★ 2 Abreviews 30 References 画像数6

製品の概要

製品名 Anti-MTCO2 antibody [EPR3314]

製品の詳細 Rabbit monoclonal [EPR3314] to MTCO2

由来種 Rabbit

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

種交差性 交差種: Human

免疫原 Synthetic peptide within Human MTCO2 aa 200-300. The exact sequence is proprietary.

ポジティブ・コントロール K562, MCF7, THP1 and HeLa cell lysates; human heart, liver and heart muscle tissues. IP: HeLa

whole cell lysate.

特記事項 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.

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.

Stable for 12 months at -20°C.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Tissue culture supernatant

ポリモノ モノクローナル

クローン名 EPR3314

アイソタイプ IgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab79393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
Flow Cyt (Intra)		1/60. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
ICC/IF		Use a concentration of 5 µg/ml.
WB	**** <u>(2)</u>	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.

ターゲット情報

機能 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.

関連疾患 Defects in MT-CO2 are a cause of mitochondrial complex IV deficiency (MT-C4D) [MIM:220110];

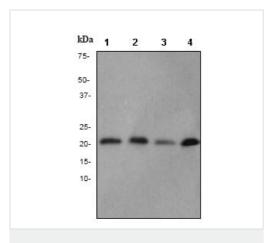
also known as cytochrome c oxidase deficiency. A disorder of the mitochondrial respiratory chain with heterogeneous clinical manifestations, ranging from isolated myopathy to severe multisystem disease affecting several tissues and organs. Features include hypertrophic cardiomyopathy, hepatomegaly and liver dysfunction, hypotonia, muscle weakness, excercise intolerance, developmental delay, delayed motor development and mental retardation. A subset of patients

manifest Leigh syndrome.

配列類似性 Belongs to the cytochrome c oxidase subunit 2 family.

細胞内局在 Mitochondrion inner membrane.

画像



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

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

dilution

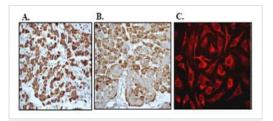
Lane 1 : K562 cell lysate
Lane 2 : MCF7 cell lysate
Lane 3 : THP1 cell lysate
Lane 4 : HeLa cell lysate

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

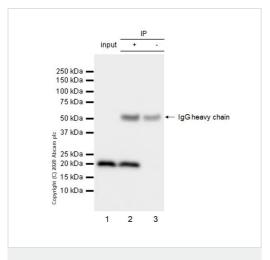


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MTCO2 antibody
[EPR3314] (ab79393)

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 lgG (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)

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

Purified ab79393 at 1/50 dilution ($2\mu g$) 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 lgG (<u>ab172730</u>) instead of ab79393 in HeLa whole cell lysate.

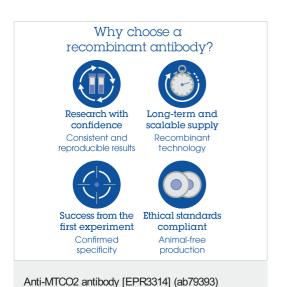
VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 21 kDa

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 lgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit lgG (monoclonal) (1 μ g/1x106 cells) used under the same conditions. Acquisition of >5,000 events was performed.



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