abcam

Product datasheet

Anti-Ndufs4 antibody [EP7832] ab137064

KO 評価済 リコンビナント RabMAb

13 Abreviews 6 References 画像数 14

製品の概要

製品名	Anti-Ndufs4 antibody [EP7832]
製品の詳細	Rabbit monoclonal [EP7832] to Ndufs4
由来種	Rabbit
アプリケーション	**適用あり:** Flow Cyt (Intra), WB, IHC-P, ICC/IF, IP
種交差性	**交差種:** Mouse, Rat, Human **交差が予測される動物種:** Sheep, Goat, Cat, Dog, Pig, Common marmoset **非交差種:** Eisenia fetida
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	293T cell lysates, fetal brain and fetal stomach tissue lysates; Human brain and Human stomach tissues Mouse heat lysate, rat heart lysate, mouse kidney, HeLa.
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**.

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 long term. Avoid freeze / thaw cycle.
バッファー	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS
精製度	Protein A purified
ポリ/モノ	モノクローナル

クローン名	EP7832
アイソタイプ	IgG

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ab137064の使用に適用されます

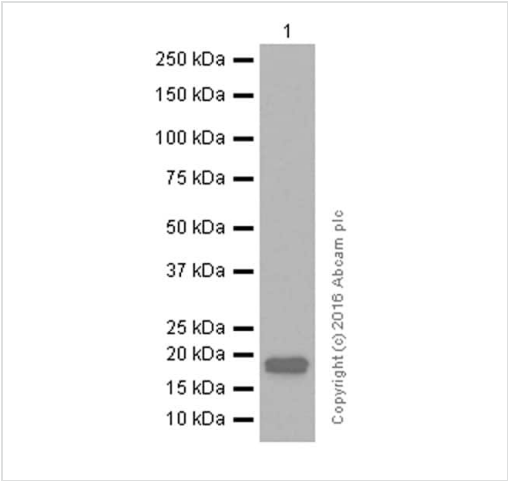
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/60. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody. For unpurifed use at 1/100 - 1/1000 dilution.
WB	★★★★★ (1)	1/500 - 1/10000. Detects a band of approximately 18 kDa (predicted molecular weight: 20 kDa).
IHC-P	★★★★★ (10)	1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF	★★★★☆ (2)	1/500. **For unpurified use at 1/50 - 1/100.**
IP		1/10 - 1/100.

ターゲット情報

機能	Accessory subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I), that is believed not to be involved in catalysis. Complex I functions in the transfer of electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone.
関連疾患	Defects in NDUFS4 are a cause of mitochondrial complex I deficiency (MT-C1D) [MIM:252010]. A disorder of the mitochondrial respiratory chain that causes a wide range of clinical disorders, from lethal neonatal disease to adult-onset neurodegenerative disorders. Phenotypes include macrocephaly with progressive leukodystrophy, non-specific encephalopathy, cardiomyopathy, myopathy, liver disease, Leigh syndrome, Leber hereditary optic neuropathy, and some forms of Parkinson disease.
配列類似性	Belongs to the complex I NDUFS4 subunit family.
細胞内局在	Mitochondrion inner membrane.

画像



Western blot - Anti-Ndufs4 antibody [EP7832] (ab137064)

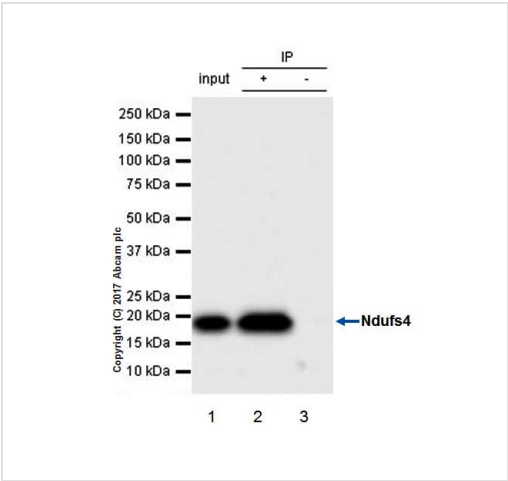
Anti-Ndufs4 antibody [EP7832] (ab137064) at 1/50000 dilution (purified) + Rat heart lysates at 15 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 20 kDa

Blocking and diluting buffer: 5% NFDM/TBST

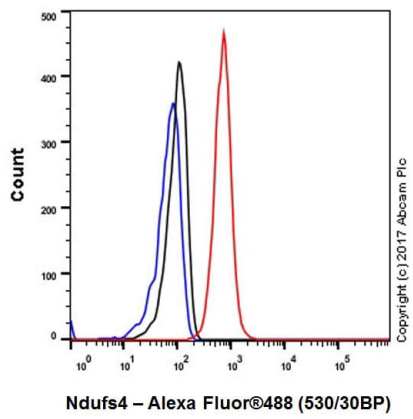


Immunoprecipitation - Anti-Ndufs4 antibody [EP7832] (ab137064)

ab137064 (purified) at 1:30 dilution (2µg) immunoprecipitating Ndufs4 in Rat heart lysate.

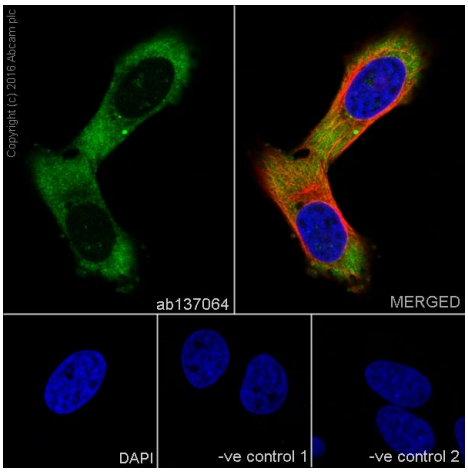
Lane 1 (input): Rat heart lysate, 10µg
Lane 2 (+): ab137064 & Rat heart lysate
Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab137064 in Rat heart lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.
Blocking and diluting buffer: 5% NFDM/TBST.



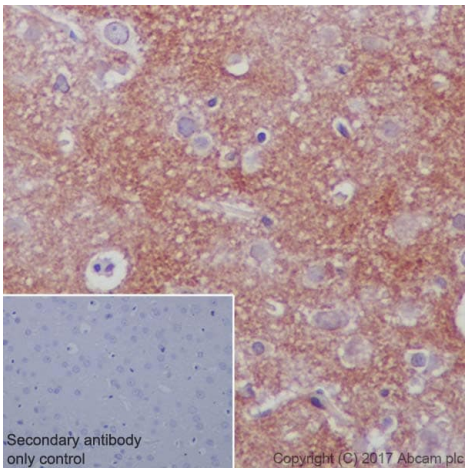
Flow Cytometry (Intracellular) - Anti-Ndufs4 antibody [EP7832] (ab137064)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Ndufs4 with purified ab137064 at 1/60 dilution (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



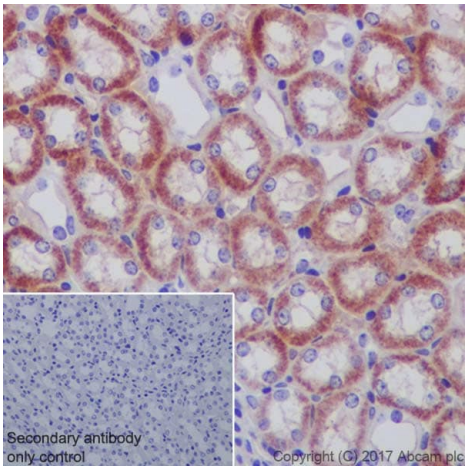
Immunocytochemistry/ Immunofluorescence - Anti-Ndufs4 antibody [EP7832] (ab137064)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Ndusf5 with Purified ab137064 at 1:500 dilution. Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with **ab7291** anti-Tubulin (mouse mAb) **ab150120** AlexaFluor ® 594 Goat anti-Mouse secondary (1:1000,2 µg/ml). **ab150077** Goat anti rabbit IgG(Alexa Fluor ® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



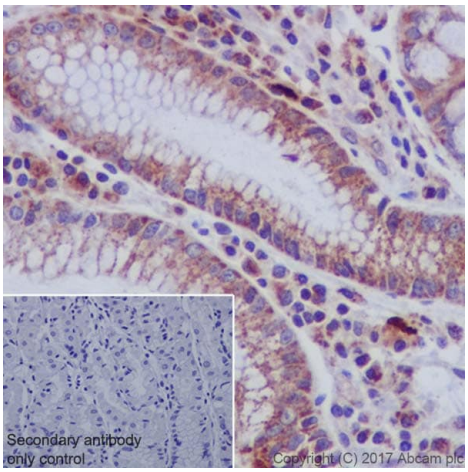
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ndufs4 antibody [EP7832] (ab137064)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat cerebrum tissue sections labeling Ndufs4 with Purified ab137064 at 1:50 dilution. Heat mediated antigen retrieval was performed using Tris/EDTA buffer, pH 9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



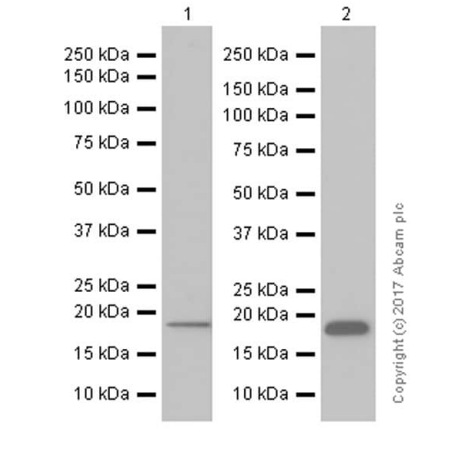
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ndufs4 antibody [EP7832] (ab137064)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse kidney tissue sections labeling Ndufs4 with Purified ab137064 at 1:50 dilution. Heat mediated antigen retrieval was performed using Tris/EDTA buffer, pH 9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ndufs4 antibody [EP7832] (ab137064)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human stomach tissue sections labeling Ndufs4 with Purified ab137064 at 1:50 dilution. Heat mediated antigen retrieval was performed using Tris/EDTA buffer, pH 9.0. Tissue was counterstained with Hematoxylin. ImmunoHistoProbe one step HRP Polymer (ready to use) secondary antibody was used at 1:0 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-Ndufs4 antibody [EP7832] (ab137064)

All lanes : Anti-Ndufs4 antibody [EP7832] (ab137064) at 1/2000 dilution (purified)

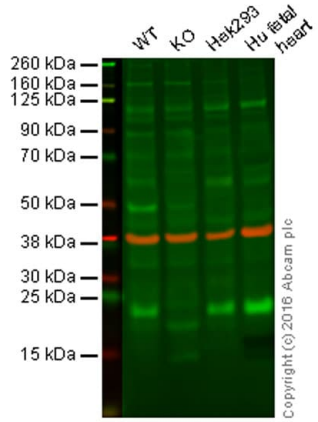
Lane 1 : Human fetal brain lysates
Lane 2 : Mouse heart lysates

Lysates/proteins at 15 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG (HRP) with minimal cross-reactivity with human IgG at 1/2000 dilution

Predicted band size: 20 kDa
Observed band size: 18 kDa

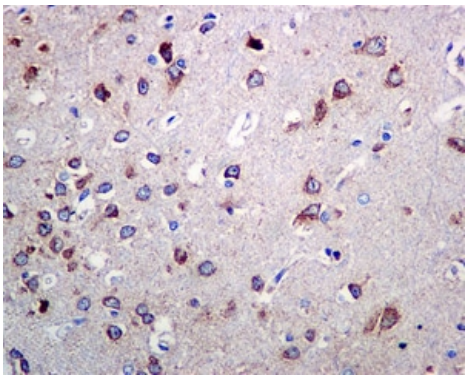
Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-Ndufs4 antibody [EP7832] (ab137064)

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: Ndufs4 knockout HAP1 cell lysate (20 µg)
Lane 3: HEK293 cell lysate (20 µg)
Lane 4: Human fetal heart tissue lysate (20 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab137064 observed at 23 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

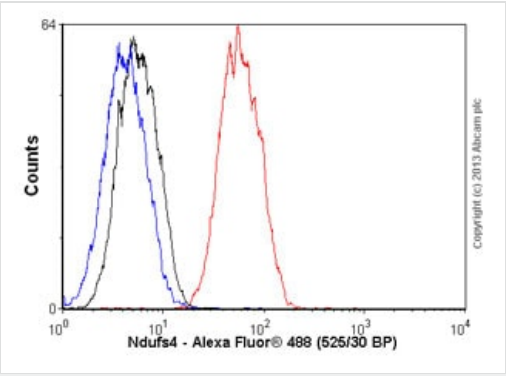
Unpurified ab137064 was shown to recognize Ndufs4 when Ndufs4 knockout samples were used, along with additional cross-reactive bands. Wild-type and Ndufs4 knockout samples were subjected to SDS-PAGE. ab137064 and **ab8245** (loading control to GAPDH) were diluted at 1/500 and 1/10 000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ndufs4 antibody [EP7832] (ab137064)

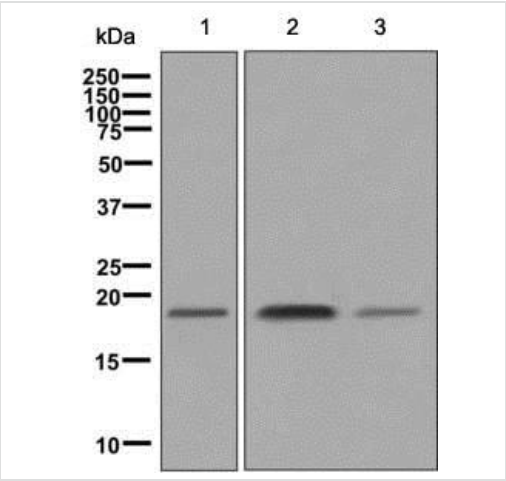
Immunohistochemical analysis of paraffin-embedded Human brain tissue labelling Ndufs4 with unpurified ab137064 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-Ndufs4 antibody [EP7832] (ab137064)

Overlay histogram showing HepG2 cells stained withunpurified ab137064 (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 (ab137064, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (**ab150077**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter. This antibody gave a positive signal in HepG2 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



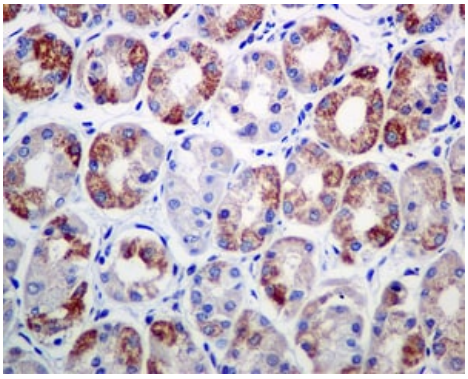
Western blot - Anti-Ndufs4 antibody [EP7832] (ab137064)

All lanes : Anti-Ndufs4 antibody [EP7832] (ab137064) at 1/1000 dilution (unpurified)

Lane 1 : 293T cell lysate
Lane 2 : Fetal brain tissue lysate
Lane 3 : Fetal kidney tissue lysate

Lysates/proteins at 10 µg per lane.

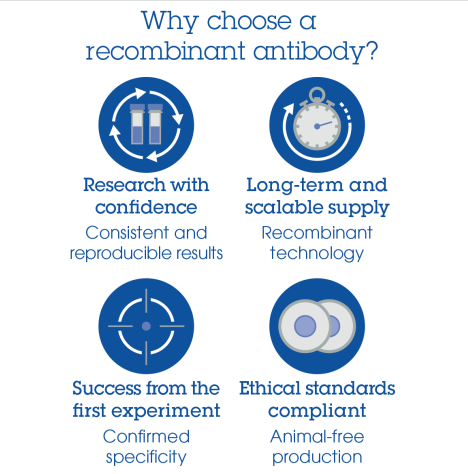
Predicted band size: 20 kDa
Observed band size: 18 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Ndufs4 antibody [EP7832] (ab137064)

Immunohistochemical analysis of paraffin-embedded Human stomach tissue labelling Ndufs4 with unpurified ab137064 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Anti-Ndufs4 antibody [EP7832] (ab137064)

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