abcam

Product datasheet

# Anti-NDUFS2 antibody [EPR16266] ab192022

敲除验证 重组 RabMAb

7 References 8 图像

## 概述

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|---|---|
| **产品名称** | Anti-NDUFS2抗体[EPR16266] |
| **描述** | 兔单克隆抗体[EPR16266] to NDUFS2 |
| **宿主** | Rabbit |
| **经测试应用** | **适用于:** ICC/IF, WB, IHC-P, IP |
| **种属反应性** | **与反应:** Mouse, Rat, Human |
| **免疫原** | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. |
| **阳性对照** | WB: HAP1, HeLa, Jurkat, 293T cell lysate. Mouse brain, kidney and spleen lysate. Rat brain and kidney lysate. C6, RAW264.7, PC-12 and NIH/3T3 cell lysate. IHC-P: Human brain tissue. Rat stomach tissue. IP: 293T cell lysate. ICC/IF: Wild-type HAP1 cells. |
| **常规说明** | This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**. |

## 性能

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| **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 long term. Avoid freeze / thaw cycle. |
| **存储溶液** | pH: 7.2<br>Preservative: 0.01% Sodium azide<br>Constituents: 40% Glycerol (glycerin, glycerine), 0.05% BSA, 59% PBS |
| **纯度** | Protein A purified |
| **克隆** | 单克隆 |
| **克隆编号** | EPR16266 |

| | |
|---|---|
| **同种型** | IgG |

## 应用

**The Abpromise guarantee** Abpromise™承诺保证使用ab192022于以下的经测试应用

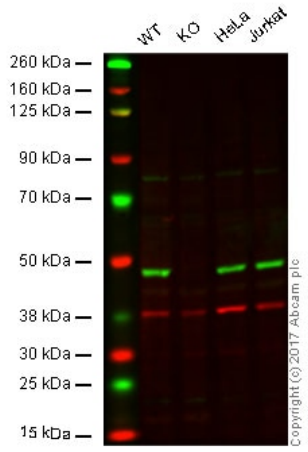
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

| 应用 | Ab评论 | 说明 |
|---|---|---|
| **ICC/IF** | | Use a concentration of 0.4 µg/ml. |
| **WB** | | 1/1000 - 1/10000. Detects a band of approximately 49 kDa (predicted molecular weight: 53 kDa). |
| **IHC-P** | | 1/200 - 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| **IP** | | 1/40. |

## 靶标

| | |
|---|---|
| **功能** | Core subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I) that is believed to belong to the minimal assembly required for 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. |
| **疾病相关** | Defects in NDUFS2 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. |
| **序列相似性** | Belongs to the complex I 49 kDa subunit family. |
| **细胞定位** | Mitochondrion inner membrane. |

## 图片

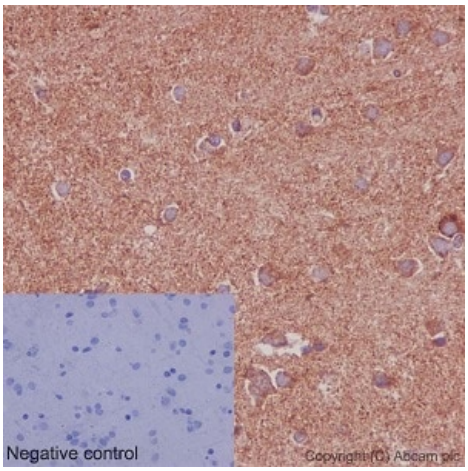



Western blot - Anti-NDUFS2 antibody [EPR16266] (ab192022)

**Lane 1:** Wild-type HAP1 whole cell lysate (20 µg)
**Lane 2:** NDUFS2 knockout HAP1 whole cell lysate (20 µg)
**Lane 3:** HeLa whole cell lysate (20 µg)
**Lane 4:** Jurkat whole cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab192022 observed at 48 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

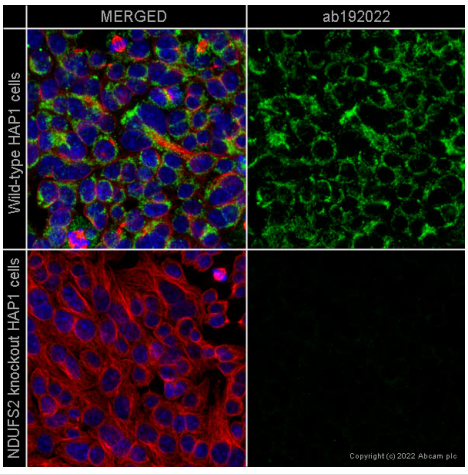
ab192022 was shown to specifically react with NDUFS2 in wild-type HAP1 cells whilst signal was lost in NDUFS2 knockout cells. Wild-type and NDUFS2 knockout samples were subjected to SDS-PAGE. ab192022 and **ab9484** (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1/20,000 dilution for 1 hour at room temperature before imaging.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NDUFS2 antibody [EPR16266] (ab192022)

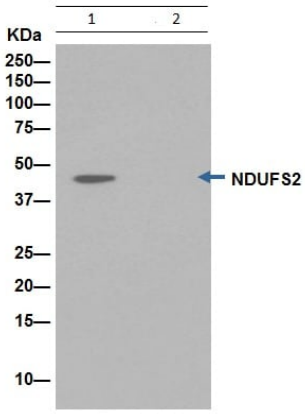
Immunohistochemical analysis of paraffin-embedded human brain tissue sections labeling NDUFS2 using ab192022 at a 1/500 dilution. A ready to use HRP Polymer for Rabbit IgG was used as the secondary. Hematoxylin counterstain. Negative control uses PBS instead of primary antibody.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.




Immunocytochemistry/ Immunofluorescence - Anti-NDUFS2 antibody [EPR16266] (ab192022)

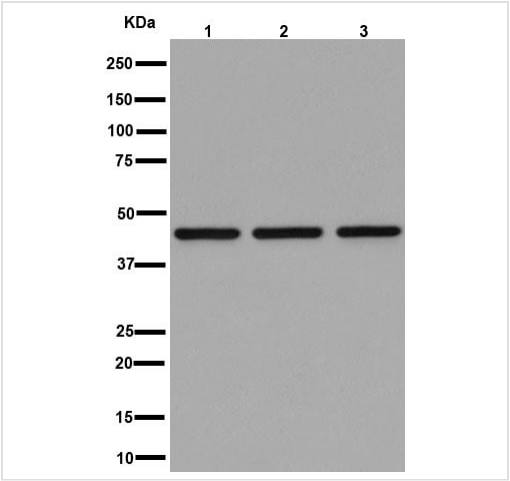
ab192022 staining NDUFS2 in wild-type Hap1 cells (top panel) and NDUFS2 knockout Hap1 cells (bottom panel). The cells were fixed with 100% methanol (5 min) then permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab192022 at 0.4µg/ml concentration and **ab7291** (Mouse monoclonal to alpha Tubulin) at 1/1000 dilution overnight at 4°C followed by a further incubation at room temperature for 1h with a goat secondary antibody to rabbit IgG (Alexa Fluor® 488) (**ab150081**) at 2 µg/ml (shown in green) and a goat secondary antibody to mouse IgG (Alexa Fluor® 594) (**ab150120**) at 2 µg/ml (shown in red). Nuclear DNA was labelled in blue with DAPI. Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.




Immunoprecipitation - Anti-NDUFS2 antibody [EPR16266] (ab192022)

Lane 1: 293T cell lysate was immunoprecipitated using ab192022 at a 1/40 dilution. Secondary used was anti-rabbit IgG (HRP), specific to the non-reduced form of IgG at a 1/1500 dilution.

Lane 2: PBS instead of 293T lysates.




Western blot - Anti-NDUFS2 antibody [EPR16266] (ab192022)

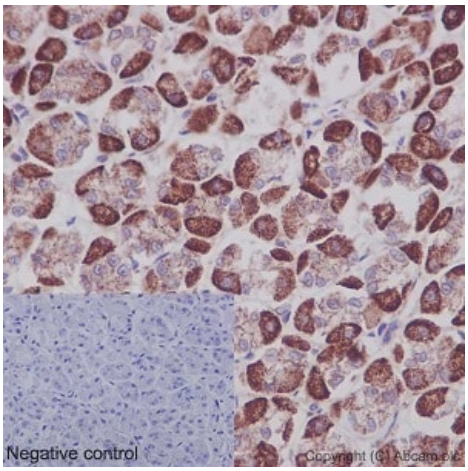
**All lanes :** Anti-NDUFS2 antibody [EPR16266] (ab192022) at 1/10000 dilution

**Lane 1 :** HeLa cell lysate
**Lane 2 :** Jurkat cell lysate
**Lane 3 :** 293T (Human embryonic kidney epithelial cell) cell lysate

Lysates/proteins at 20 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

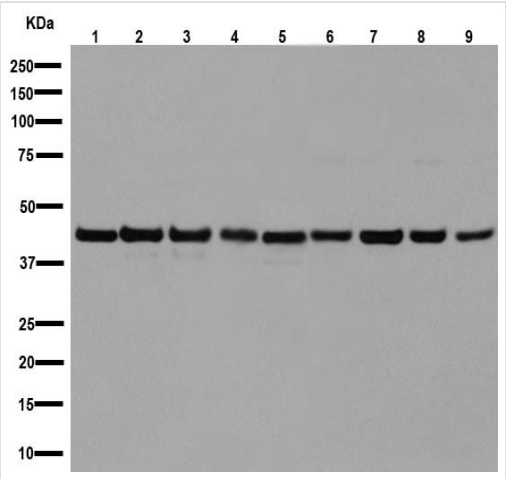
**Predicted band size:** 53 kDa




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NDUFS2 antibody [EPR16266] (ab192022)

Immunohistochemical analysis of paraffin-embedded rat stomach tissue sections labeling NDUFS2 using ab192022 at a 1/500 dilution. A ready to use HRP Polymer for Rabbit IgG was used as the secondary. Hematoxylin counterstain. Negative control uses PBS instead of primary antibody.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.




Western blot - Anti-NDUFS2 antibody [EPR16266] (ab192022)

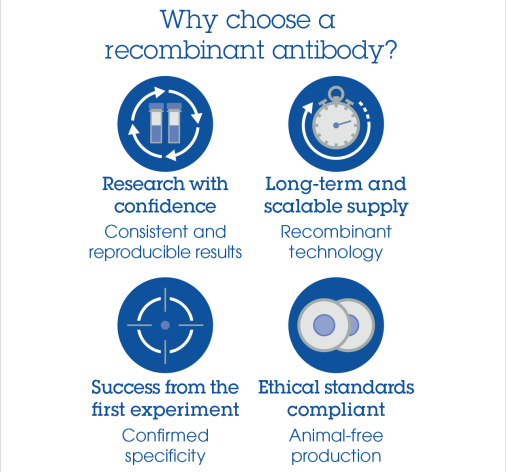
**All lanes :** Anti-NDUFS2 antibody [EPR16266] (ab192022) at 1/1000 dilution

**Lane 1 :** Mouse brain lysate
**Lane 2 :** Mouse kidney lysate
**Lane 3 :** Mouse spleen lysate
**Lane 4 :** Rat brain lysate
**Lane 5 :** Rat kidney lysate
**Lane 6 :** C6 cell lysate
**Lane 7 :** RAW264.7 cell lysate
**Lane 8 :** PC-12 cell lysate
**Lane 9 :** NIH3T3 cell lysate

Lysates/proteins at 10 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 53 kDa
**Observed band size:** 49 kDa




Anti-NDUFS2 antibody [EPR16266] (ab192022)



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