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Product datasheet

Anti-NDUFA9 antibody [20C11B11B11] ab14713

敲除验证

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概述

产品名称	Anti-NDUFA9抗体[20C11B11B11]
描述	小鼠单克隆抗体[20C11B11B11] to NDUFA9
宿主	Mouse
经测试应用	**适用于:** IHC-P, WB, Flow Cyt
种属反应性	**与反应:** Mouse, Rat, Cow, Human
免疫原	Tissue, cells or virus corresponding to Cow NDUFA9.
阳性对照	WB: WI38 and NIH 3T3 whole cell lysates, human testis tissue lysate and human, cow, rat and mouse heart mitochondria. IHC-P: Human spinal column tissue. Flow Cyt: HepG2 cells.
常规说明	This monoclonal antibody to NDUFA9 has been knockout validated in Western blot. The expected band for NDUFA9 was observed in wild type cells and the band was not seen in knockout cells. This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact **orders@abcam.com**. 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.
存储溶液	pH: 7.4 Preservative: 0.02% Sodium azide Constituent: HEPES buffered saline
纯度	IgG fraction
纯化说明	Near homogeneity as judged by SDS-PAGE. The antibody was produced in vitro using

	hybridomas grown in serum-free medium, and then purified by biochemical fractionation.
克隆	单克隆
克隆编号	20C11B11B11
同种型	IgG1
轻链类型	kappa

应用

The Abpromise guarantee Abpromise™承诺保证使用ab14713于以下的经测试应用

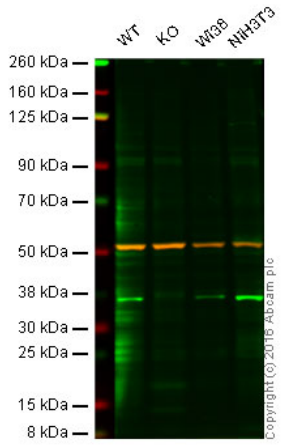
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P	★★★☆☆ (2)	Use at an assay dependent concentration.
WB	★★★★★ (5)	Use a concentration of 1 µg/ml. Detects a band of approximately 36 kDa (predicted molecular weight: 40 kDa).
Flow Cyt		Use 1-2µg for 10^6 cells. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

靶标

功能	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.
序列相似性	Belongs to the complex I NDUFA9 subunit family.
细胞定位	Mitochondrion matrix.

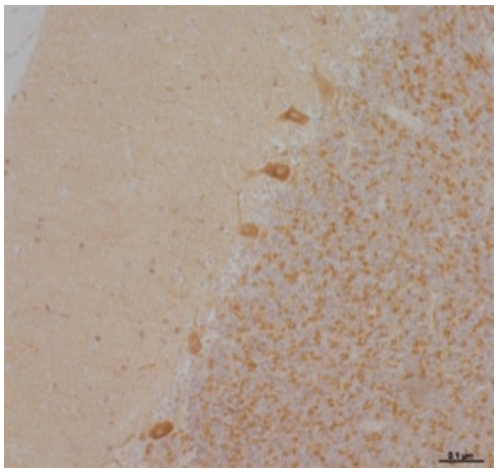
图片



Western blot - Anti-NDUFA9 antibody [20C11B11B11] (ab14713)

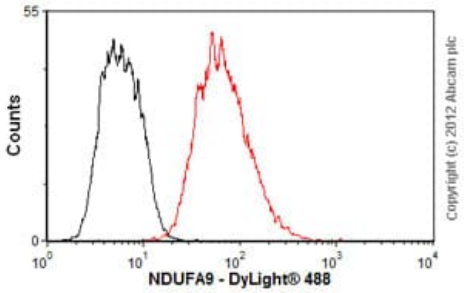
Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: NDUFA9 knockout HAP1 cell lysate (20 µg)
Lane 3: WI38 cell lysate (20 µg)
Lane 4: NIH3T3 cell lysate (20 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab14713 observed at 40 kDa. Red - loading control, **ab176560**, observed at 52 kDa.

ab14713 was shown to specifically react with NDUFA9 in wild-type HAP1 cells. No band was observed when NDUFA9 knockout HAP1 samples were used. Wild-type and NDUFA9 knockout samples were subjected to SDS-PAGE. ab14713 and **ab176560** (loading control to alpha tubulin) were diluted at 1µg/mL and 1/10,000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed (**ab216772**) and Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed (**ab216777**) secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



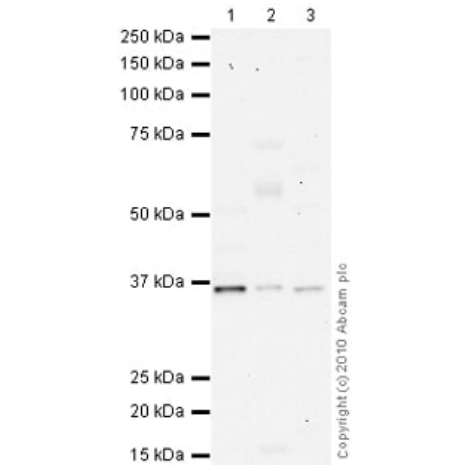
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NDUFA9 antibody [20C11B11B11] (ab14713)

ab14713 a 1/100 dilution staining NDUFA9 in Human spinal column tissue by Immunohistochemistry (Formalin/PFA-Fixed paraffin-embedded sections). Antibody was incubated with the sample for 1 hour. Sections were incubated in peroxidase-conjugated rabbit anti-mouse secondary (diluted 1/100 in 4% BSA in PBST) for 1 hour at room temperature. Sections were washed x3 in PBST and peroxidase activity was demonstrated using kit. Antigen retrieval was performed by 1 minute of pressure cooking with 1 mmol EDTA pH 8.0.



Flow Cytometry - Anti-NDUFA9 antibody [20C11B11B11] (ab14713)

Overlay histogram showing HepG2 cells stained with ab14713 (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 (ab14713, 2µg/1x10^6 cells) for 30 min at 22ºC. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22ºC. Isotype control antibody (black line) was Mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.



Western blot - Anti-NDUFA9 antibody [20C11B11B11] (ab14713)

All lanes : Anti-NDUFA9 antibody [20C11B11B11] (ab14713) at 1 µg/ml

Lane 1 : WI38 (Human lung fibroblast cell line) Whole Cell Lysate
Lane 2 : Human testis tissue lysate - total protein (**ab30257**)
Lane 3 : NIH 3T3 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

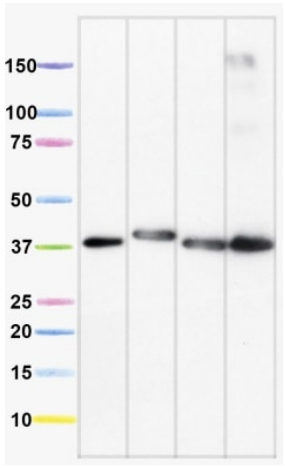
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 40 kDa
Observed band size: 36 kDa
Additional bands at: 58 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 20 minutes

The band observed at 36 kDa could potentially be a cleaved form of NDUFA9 due to the presence of a 35 amino acid transit peptide.



Western blot - Anti-NDUFA9 antibody [20C11B11B11] (ab14713)

All lanes : Anti-NDUFA9 antibody [20C11B11B11] (ab14713)

Lane 1 : Isolated mitochondria from Human heart at 5 µg
Lane 2 : Isolated mitochondria from Bovine heart at 1 µg
Lane 3 : Isolated mitochondria from Rat heart at 10 µg
Lane 4 : Isolated mitochondria from Mouse Heart at 10 µg

Secondary
All lanes : Goat anti-Mouse IgG

Predicted band size: 40 kDa
Observed band size: 37 kDa

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