abcam

Product datasheet

Anti-Ndufs4 antibody [2C7CD4AG3] ab87399

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Overview

Product name	Anti-Ndufs4 antibody [2C7CD4AG3]
Description	Mouse monoclonal [2C7CD4AG3] to Ndufs4
Host species	Mouse
Tested applications	**Suitable for:** Flow Cyt, WB
Species reactivity	**Reacts with:** Mouse, Rat, Cow, Human
Immunogen	Recombinant full length protein. This information is considered to be commercially sensitive.
Positive control	WB: isolated mitochondria from human, bovine, rat, and mouse heart tissue. Flow Cyt: HepG2 cells.
General notes	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 Product was previously marketed under the MitoSciences sub-brand.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.5 Preservative: 0.02% Sodium azide Constituents: HEPES, Sodium chloride
Purity	IgG fraction
Purification notes	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.
Clonality	Monoclonal

Clone number	2C7CD4AG3
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab87399 in the following tested applications.

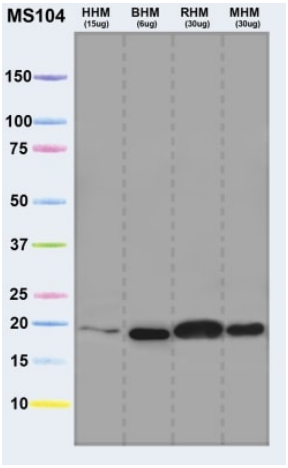
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt	★★★★☆ (1)	Use 1µg for 10^6 cells. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
WB	★★★★☆ (4)	Use a concentration of 1 µg/ml. Detects a band of approximately 20 kDa (predicted molecular weight: 20 kDa).

Target

Function	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.
Involvement in disease	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.
Sequence similarities	Belongs to the complex I NDUFS4 subunit family.
Cellular localization	Mitochondrion inner membrane.

Images

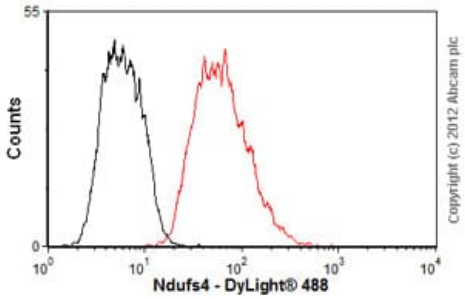


Western blot - Anti-Ndufs4 antibody [2C7CD4AG3] (ab87399)

All lanes : Anti-Ndufs4 antibody [2C7CD4AG3] (ab87399)

Lane 1 : Isolated mitochondria from human heart at 15 µg
Lane 2 : Isolated mitochondria from bovine heart at 6 µg
Lane 3 : Isolated mitochondria from rat heart at 30 µg
Lane 4 : Isolated mitochondria from mouse heart at 30 µg

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



Flow Cytometry - Anti-Ndufs4 antibody [2C7CD4AG3] (ab87399)

Overlay histogram showing HepG2 cells stained with ab87399 (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 (ab87399, 1µg/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.

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