


Product datasheet

Anti-NDUFA1 antibody [EPR12083] ab176563

Recombinant RabMAb

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Overview

Product name	Anti-NDUFA1 antibody [EPR12083]
Description	Rabbit monoclonal [EPR12083] to NDUFA1
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, IP Unsuitable for: Flow Cyt or ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Gorilla  Does not react with: Mouse, Rat
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	A673 cell lysate; Human skeletal muscle, Human fetal kidney and fetal heart lysates; Human heart and skeletal muscle tissues.
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - 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 .

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal

Clone number EPR12083

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab176563 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
WB		1/1000 - 1/5000. Predicted molecular weight: 8 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP		1/10 - 1/100.

Application notes Is unsuitable for Flow Cyt or ICC/IF.

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.

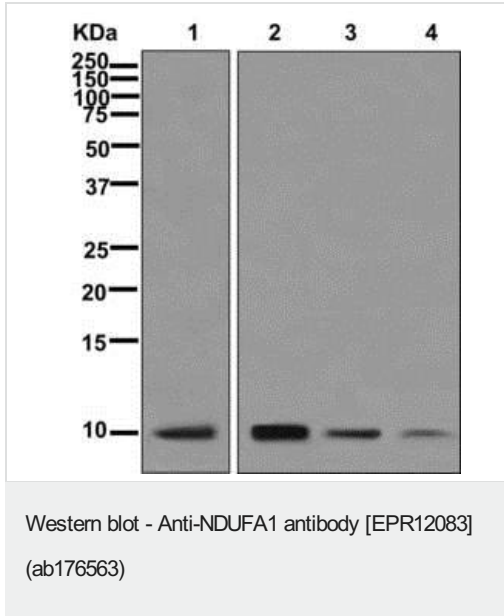
Tissue specificity Primarily expressed in heart and skeletal muscle.

Involvement in disease Defects in *NDUFA1* 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 *NDUFA1* subunit family.

Cellular localization Mitochondrion inner membrane.

Images



All lanes : Anti-NDUFA1 antibody [EPR12083] (ab176563) at 1/1000 dilution

Lane 1 : A673 cell lysate

Lane 2 : Human fetal kidney tissue lysate

Lane 3 : Human skeletal muscle tissue lysate

Lane 4 : Human fetal heart tissue lysate

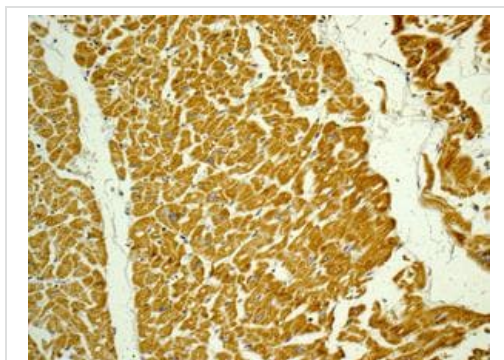
Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat anti-rabbit HRP conjugated at 1/2000 dilution

Developed using the ECL technique.

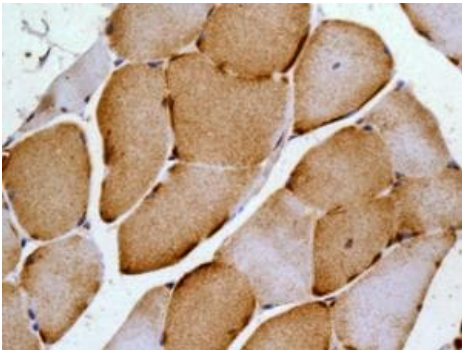
Predicted band size: 8 kDa



Immunohistochemical analysis of formalin-fixed, paraffin-embedded, Human heart tissue labeling NDUF1 with ab176563 at a 1/100 dilution.

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

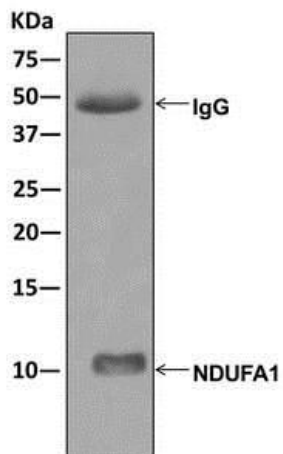
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NDUF1 antibody [EPR12083] (ab176563)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NDUFA1 antibody [EPR12083] (ab176563)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded, Human skeletal muscle tissue labeling NDUFA1 with ab176563 at a 1/100 dilution.





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



Immunoprecipitation - Anti-NDUFA1 antibody [EPR12083] (ab176563)

Western blot analysis on immunoprecipitation pellet from Human fetal heart lysate labeling NDUFA1 with ab176563 at 1/10 dilution.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-NDUFA1 antibody [EPR12083] (ab176563)

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