abcam

ab250690

Anti-NDUFB11 antibody [EPR15252] - BSA and Azide free

Recombinant | RabMAb

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Constituents: PBS
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Carrier free	Yes
Clone number	EPR15252
Purification technique	Affinity purification Protein A
Concentration	0.924 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Predicted

Species	Mouse, Rat
Dilution info	-
Notes	-

Target data

See full target information NDUFB11

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.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Do Not Freeze

Notes

ab250690 is the carrier-free version of ab183716.

Patented technology

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?

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 batch production

For more information, read more on recombinant antibodies.

Conjugation ready

Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with 1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

Compatibility

This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody

preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	NDUFB11 also known as NADH:ubiquinone oxidoreductase subunit B11 is a component of mitochondrial Complex I. It has a molecular weight of approximately 12 kDa. This protein contributes to the proper function of the electron transport chain. NDUFB11 is expressed mainly in tissues with high energy demands like the heart muscle and brain. It plays a role in facilitating electron transfer from NADH to ubiquinone which is a critical step in cellular respiration.
Biological function summary	NDUFB11 becomes part of the mitochondrial respiratory chain complex I an essential structure for ATP production through oxidative phosphorylation. This complex includes multiple subunits and is located on the inner mitochondrial membrane. NDUFB11 contributes to the assembly and stability of this complex ensuring efficient energy production within cells. Complex I dysfunction often impacts energy-dependent tissues leading to various metabolic challenges.
Pathways	NDUFB11 participates in the oxidative phosphorylation pathway vital for energy production in eukaryotic cells. It interacts with other important proteins of the electron transport chain like NDUFS1 and NDUFA13. These proteins collectively ensure the smooth transfer of electrons for ATP synthesis. Additionally NDUFB11 is involved in the mitochondrial electron transport which is essential for maintaining cellular metabolic processes.
Associated diseases and disorders	NDUFB11 mutations link to mitochondrial diseases such as Leigh syndrome characterized by neurometabolic dysfunction. This protein's malfunction can also connect to complex I deficiency affecting cellular respiration and leading to various clinical symptoms including muscle weakness and neurological impairments. Mitochondrial diseases associated with NDUFB11 may also involve interactions with other mitochondrial subunits indicating an intricate relationship with overall mitochondrial health.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

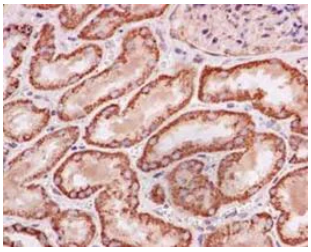
We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

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4 product images

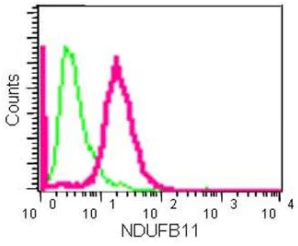


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NDUFB11 antibody [EPR15252] - BSA and Azide free (ab250690)

NDUFB11 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-NDUFB11 antibody

This data was developed using ab183716, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded, Human kidney tissue labeling NDUFB11 with ab183716 at a 1/250 dilution. Counter stained with hematoxylin.

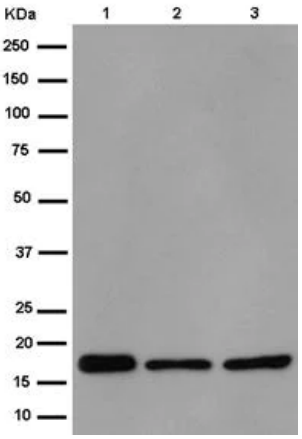
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-NDUFB11 antibody [EPR15252] - BSA and Azide free (ab250690)

NDUFB11 Flow Cytometry (Intracellular) staining using rabbit Anti-NDUFB11 antibody

This data was developed using ab183716, the same antibody clone in a different buffer formulation.
Intracellular Flow Cytometry analysis of paraformaldehyde-fixed HeLa cells labeling NDUFB11 with ab183716 at a 1/240 dilution and secondary antibody goat anti-rabbit IgG (FITC, red) at a 1/150 dilution, or negative control rabbit IgG (green).



Western blot - Anti-NDUFB11 antibody [EPR15252] - BSA and Azide free (ab250690)

NDUFB11 Western blot staining using rabbit Anti-NDUFB11 antibody

This data was developed using ab183716, the same antibody clone in a different buffer formulation.
Lanes 1 - 2:
Western blot - Anti-NDUFB11 antibody [EPR15252] (ab183716) at 1/50000 dilution

Lane 3:
Western blot - Anti-NDUFB11 antibody [EPR15252] (ab183716) at 1/10000 dilution

Lane 1:
HeLa cell lysate at 20 µg

Lane 2:
HepG2 cell lysate at 20 µg

Lane 3:
A431 cell lysate at 20 µg

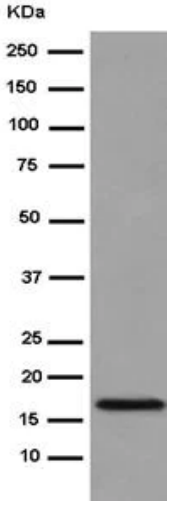
Secondary

All lanes:
goat anti-rabbit IgG, (H+L), peroxidase conjugated at 1/1000 dilution

Developed using the ECL technique.

Predicted band size: 17 kDa

Observed band size: 17 kDa



Western blot - Anti-NDUFB11 antibody [EPR15252] - BSA and Azide free (ab250690)

This data was developed using ab183716, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-NDUFB11 antibody [EPR15252] (ab183716) at 1/10000 dilution

All lanes:
Human heart tissue lysate at 20 µg

Secondary

All lanes:
goat anti-rabbit IgG, (H+L), peroxidase conjugated at 1/1000 dilution

Developed using the ECL technique.

Predicted band size: 17 kDa

Observed band size: 17 kDa

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.