abcam

ab249605

Anti-NDUFS8 antibody [EPR11892] - 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	EPR11892
Purification technique	Affinity purification
Concentration	1.019 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human
Dilution info	-

Notes	-

IP

Tested

Species	Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Target data

See full target information NDUFS8

Function	Core subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I) which catalyzes electron transfer from NADH through the respiratory chain, using ubiquinone as an electron acceptor (PubMed:22499348). Essential for the catalytic activity and assembly of complex I (PubMed:22499348).

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

ab249605 is the carrier-free version of ab170936.

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	The NDUFS8 protein also known as NADH:ubiquinone oxidoreductase core subunit S8 serves an important function in the mitochondrial electron transport chain. It weighs approximately 23 kDa and is expressed in many tissues due to its essential role in energy production. NDUFS8 is a part of the larger mitochondrial complex I where it plays a role in transferring electrons derived from NADH to ubiquinone. Through this process NDUFS8 contributes to the creation of a proton gradient used for ATP synthesis.

Biological function summary	The NDUFS8 protein functions as an integral component of the mitochondrial respiratory complex I. Complex I is essential for cellular respiration and contributes to the production of ATP which cells use as an energy source. NDUFS8 helps facilitate the electron transport chain as a subunit of this multi-protein complex ensuring effective electron transfer and energy conversion within the mitochondria.
Pathways	The NDUFS8 protein operates within the oxidative phosphorylation pathway a major energy-producing pathway in cells. It also has connections with the tricarboxylic acid (TCA) cycle where NADH is generated and enters the electron transport chain through NDUFS8. The NDUFS8 protein collaborates with other subunits of complex I such as NDUFV1 and NDUFV2 to ensure proper electron flow and energy production.
Associated diseases and disorders	Mutations in the NDUFS8 protein can lead to mitochondrial disorders such as Leigh syndrome and mitochondrial encephalomyopathy. These conditions are characterized by severe energy production deficiencies due to impaired function of complex I. NDUFS8 mutations can interact with other proteins implicated in these disorders including NDUFAF2 which is involved in the assembly of complex I further disrupting normal mitochondrial activity and energy metabolism.

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

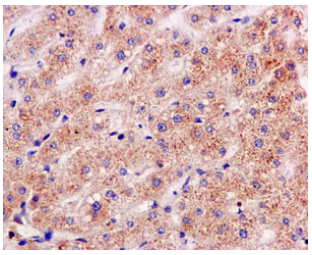
We do not recommend this combination. It is not covered by our product promise.

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.

5 product images

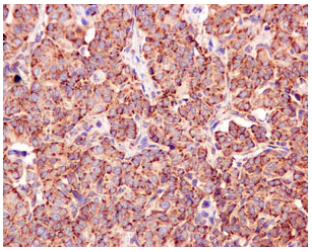


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NDUFS8 antibody [EPR11892] - BSA and Azide free (ab249605)

NDUFS8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-NDUFS8 antibody

This data was developed using ab170936, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human liver tissue labeling NDUFS8 with ab170936 at 1/250 dilution.

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

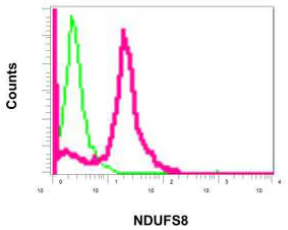


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-NDUFS8 antibody [EPR11892] - BSA and Azide free (ab249605)

NDUFS8 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-NDUFS8 antibody

This data was developed using ab170936, the same antibody clone in a different buffer formulation.
Immunohistochemical analysis of paraffin-embedded Human thyroid carcinoma tissue labeling NDUFS8 with ab170936 at 1/250 dilution.

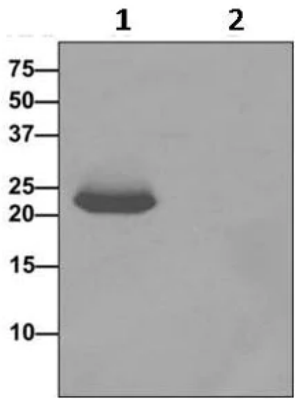
Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-NDUFS8 antibody [EPR11892] - BSA and Azide free (ab249605)

NDUFS8 Flow Cytometry (Intracellular) staining using rabbit Anti-NDUFS8 antibody

This data was developed using ab170936, the same antibody clone in a different buffer formulation.
Intracellular flow cytometric analysis of permeabilized Jurkat cells using ab170936 (red) at 1/10 dilution or a rabbit IgG (negative) (green).

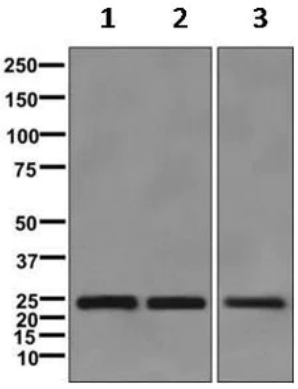


Immunoprecipitation - Anti-NDUFS8 antibody [EPR11892] - BSA and Azide free (ab249605)

This data was developed using ab170936, the same antibody clone in a different buffer formulation.
Western blot analysis on immunoprecipitation pellet from (1) HeLa cell lysate or (2) 1X PBS (negative control) using ab170936 at 1/10 dilution and HRP-conjugated anti-rabbit IgG preferentially detecting the non-reduced form of rabbit IgG.

All lanes:
Immunoprecipitation - Anti-NDUFS8 antibody [EPR11892] (ab170936)

Predicted band size: 23 kDa



Western blot - Anti-NDUFS8 antibody [EPR11892] - BSA and Azide free (ab249605)

NDUFS8 Western blot staining using rabbit Anti-NDUFS8 antibody

This data was developed using ab170936, the same antibody clone in a different buffer formulation.
All lanes:
Western blot - Anti-NDUFS8 antibody [EPR11892] (ab170936) at 1/1000 dilution

Lane 1:
HeLa cell lysate at 10 µg

Lane 2:
HepG2 cell lysate at 10 µg

Lane 3:
Jurkat cell lysate at 10 µg

Predicted band size: 23 kDa, 83 kDa

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