

NDUFS4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6932b

Product Information

Application IHC-P-Leica, FC, WB, E

Primary Accession <u>043181</u>

Reactivity Human, Rat, Mouse

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB21548Calculated MW20108Antigen Region131-160

Additional Information

Gene ID 4724

Other Names NADH dehydrogenase [ubiquinone] iron-sulfur protein 4, mitochondrial,

Complex I-18 kDa, CI-18 kDa, Complex I-AQDQ, CI-AQDQ, NADH-ubiquinone

oxidoreductase 18 kDa subunit, NDUFS4

Target/Specificity This NDUFS4 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 131-160 amino acids from the

C-terminal region of human NDUFS4.

Dilution IHC-P-Leica~~1:250 FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent

concentration.

Format Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This

antibody is purified through a protein A column, followed by peptide affinity

purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions NDUFS4 Antibody (C-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name NDUFS4

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.

Cellular Location

Mitochondrion inner membrane; Peripheral membrane protein; Matrix side. Note=The interaction with BCAP31 mediates mitochondria localization.

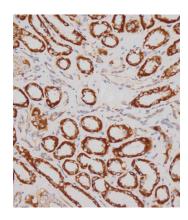
Background

NDUFS4 is an accessory subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase(Complex I), or NADH:ubiquinone oxidoreductase, the first multi-subunit enzyme complex of the mitochondrial respiratory chain. Complex I plays a vital role in cellular ATP production, the primary source of energy for many crucial processes in living cells. It removes electrons from NADH and passes them by a series of different protein-coupled redox centers to the electron acceptor ubiquinone. In well-coupled mitochondria, the electron flux leads to ATP generation via the building of a proton gradient across the inner membrane.

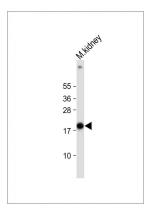
References

Panelli, D., et.al., Biochimie 90 (10), 1452-1460 (2008)

Images



Immunohistochemical analysis of AP6932b on paraffin-embedded human kidney tissue was performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:250) for 15min at room temperature. Leica Bond Polymer Refine Detection was used as the secondary antibody.



Anti-NDUFS4 Antibody (C-term) at 1:2000 dilution + Mouse kidney tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 20 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Citations

• Stable nuclear expression of ATP8 and ATP6 genes rescues a mtDNA Complex V null mutant,

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