

### **NDUFS4 Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6932b

### **Specification**

### NDUFS4 Antibody (C-term) - Product Information

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

Primary Accession <u>043181</u>

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 20108
Antigen Region 131-160

### NDUFS4 Antibody (C-term) - 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~~1:2000

E~~Use at an assay dependent concentration.

### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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.

### NDUFS4 Antibody (C-term) - 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**

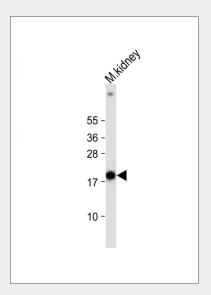
Mitochondrion inner membrane; Peripheral membrane protein; Matrix side. Note=The interaction with BCAP31 mediates mitochondria localization.

### NDUFS4 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

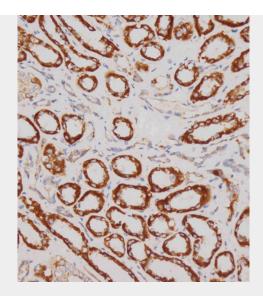
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### NDUFS4 Antibody (C-term) - Images

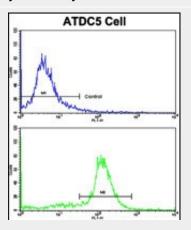


Anti-NDUFS4 Antibody (C-term) at 1:2000 dilution + Mouse kidney tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 20 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





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.



Flow cytometric analysis of ATDC5 cells using NDUFS4 Antibody (C-term)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## NDUFS4 Antibody (C-term) - 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.

# NDUFS4 Antibody (C-term) - References

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

NDUFS4 Antibody (C-term) - Citations

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



