

ND4L Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17147b

Product Information

| Application | WB, FC, E |
|-------------------|-------------------------------|
| Primary Accession | <u>P03901</u> |
| Other Accession | <u>Q7J3C3, YP_003024034.1</u> |
| Reactivity | Human |
| Predicted | Monkey |
| Host | Rabbit |
| Clonality | Polyclonal |
| Isotype | Rabbit IgG |
| Clone Names | RB35904 |
| Calculated MW | 10741 |
| Antigen Region | 65-93 |

Additional Information

| Gene ID | 4539 |
|--------------------|--|
| Other Names | NADH-ubiquinone oxidoreductase chain 4L, NADH dehydrogenase subunit 4L, MT-ND4L, MTND4L, NADH4L, ND4L |
| Target/Specificity | This ND4L antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 65-93 amino acids from the C-terminal region of human ND4L. |
| Dilution | WB~~1:1000 FC~~1:25 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 | ND4L Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

Protein Information

| Name | MT-ND4L (<u>HGNC:7460</u>) |
|----------|------------------------------|
| Synonyms | MTND4L, NADH4L, ND4L |

| 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: <u>28844695</u>). Part of the enzyme membrane arm which is embedded in the lipid bilayer and involved in proton translocation (PubMed: <u>28844695</u>). |
|-------------------|---|
| Cellular Location | Mitochondrion inner membrane {ECO:0000250 UniProtKB:P03902}; Multi-pass membrane protein |

Background

Core subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I) that is believed to belong to the minimal assembly required for 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 (By similarity).

References

Andrews, R.M., et al. Nat. Genet. 23 (2), 147 (1999) :

Anderson, S., et al. Nature 290(5806):457-465(1981)

Submitted (08-JUL-2009) National Center for Biotechnology Information, NIH, Bethesda, MD 20894, USA : Kogelnik, A.M., et al. Submitted (24-AUG-2006) Mitomap.org, Center for Molecular and Mitochondrial Medicine and Genetics (MAMMAG) University of California, University of California, Irvine, Irvine, CA 92697-3940, USA :

Kogelnik, A.M., et al. Submitted (18-APR-1997) Center for Molecular Medicine, Emory University School of Medicine, 1462 Clifton Road, Suite 420, Atlanta, GA 30322, USA :

Images





Overlay histogram showing U-2 OS cells stained with AP17147b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP17147b, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

All lanes : Anti-ND4L Antibody (C-term) at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: HL-60 whole cell lysate Lane 3: Human kidney lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 11 kDa Blocking/Dilution buffer: 5% NFDM/TBST. Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.