

**NDUFV1 Antibody(N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP19414a**

**Specification**

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**NDUFV1 Antibody(N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P49821</a>
Other Accession	<a href="#">Q91YT0</a> , <a href="#">Q8HXQ9</a> , <a href="#">P25708</a> , <a href="#">NP_009034.2</a>
Reactivity	Human
Predicted	Bovine, Monkey, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	50817
Antigen Region	21-50

**NDUFV1 Antibody(N-term) - Additional Information**

**Gene ID** 4723

**Other Names**

NADH dehydrogenase [ubiquinone] flavoprotein 1, mitochondrial, Complex I-51kD, CI-51kD, NADH dehydrogenase flavoprotein 1, NADH-ubiquinone oxidoreductase 51 kDa subunit, NDUFV1, UQOR1

**Target/Specificity**

This NDUFV1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 21-50 amino acids from the N-terminal region of human NDUFV1.

**Dilution**

WB~~1:1000

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**

NDUFV1 Antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**NDUFV1 Antibody(N-term) - Protein Information**

**Name** NDUFV1 ([HGNC:7716](#))

## Synonyms UQOR1

**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:[28844695](#)). Part of the peripheral arm of the enzyme, where the electrons from NADH are accepted by flavin mononucleotide (FMN) and then passed along a chain of iron-sulfur clusters by electron tunnelling to the final acceptor ubiquinone (PubMed:[28844695](#)). Contains FMN, which is the initial electron acceptor as well as one iron-sulfur cluster (PubMed:[28844695](#)).

## Cellular Location

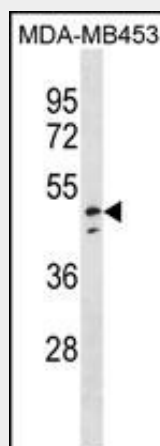
Mitochondrion inner membrane {ECO:0000250|UniProtKB:P25708}; Peripheral membrane protein {ECO:0000250|UniProtKB:P25708}; Matrix side {ECO:0000250|UniProtKB:P25708}

## NDUFV1 Antibody(N-term) - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## NDUFV1 Antibody(N-term) - Images



NDUFV1 Antibody (N-term)(Cat. #AP19414a) western blot analysis in MDA-MB453 cell line lysates (35ug/lane). This demonstrates the NDUFV1 antibody detected the NDUFV1 protein (arrow).

## NDUFV1 Antibody(N-term) - Background

The mitochondrial respiratory chain provides energy to cells via oxidative phosphorylation and consists of four membrane-bound electron-transporting protein complexes (I-IV) and an ATP synthase (complex V). This gene encodes a 51 kDa subunit of the NADH:ubiquinone oxidoreductase complex I; a large complex with at least 45 nuclear and mitochondrial encoded subunits that

liberates electrons from NADH and channels them to ubiquinone. This subunit carries the NADH-binding site as well as flavin mononucleotide (FMN)- and Fe-S-binding sites. Defects in complex I are a common cause of mitochondrial dysfunction; a syndrome that occurs in approximately 1 in 10,000 live births. Mitochondrial complex I deficiency is linked to myopathies, encephalomyopathies, and neurodegenerative disorders such as Parkinson's disease and Leigh syndrome. Alternative splicing results in multiple transcript variants encoding distinct isoforms.

#### **NDUFV1 Antibody(N-term) - References**

Wang, W., et al. Nucleic Acids Res. (2010) In press :  
Moran, M., et al. Biochim. Biophys. Acta 1802(5):443-453(2010)  
Saito, A., et al. J. Hum. Genet. 54(6):317-323(2009)  
Starr, J.M., et al. Mech. Ageing Dev. 129(12):745-751(2008)  
Ben-Shachar, D., et al. PLoS ONE 2 (9), E817 (2007) :