10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

NDUFV1 Antibody(N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19414a

Specification

NDUFV1 Antibody(N-term) - Product Information

Application	**WB,E**
Primary Accession	P49821
Other Accession	Q91YT0, Q8HXQ9, P25708, NP_009034.2
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).

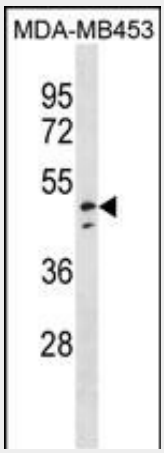
Cellular Location
Mitochondrion inner membrane {ECO:0000250|UniProtKB:P25708}; Peripheral membrane protein {ECO:0000250|UniProtKB:P25708}; Matrix side {ECO:0000250|UniProtKB:P25708}

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 Cytomety
- 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-biding 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) :