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# NDUFV1 Antibody(N-term) Blocking peptide

**Synthetic peptide**
**Catalog # BP19414a**

## Specification

### NDUFV1 Antibody(N-term) Blocking peptide - Product Information

Primary Accession P49821

### NDUFV1 Antibody(N-term) Blocking peptide - 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

**Format**
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### NDUFV1 Antibody(N-term) Blocking peptide - 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:<a href="http://www.uniprot.org/citations/28844695" target="_blank">28844695</a>). 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:<a href="http://www.uniprot.org/citations/28844695" target="_blank">28844695</a>). Contains FMN, which is the initial electron acceptor as well as one iron-sulfur cluster (PubMed:<a href="http://www.uniprot.org/citations/28844695" target="_blank">28844695</a>).

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

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## NDUFV1 Antibody(N-term) Blocking peptide - Protocols

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

- Blocking Peptides

## NDUFV1 Antibody(N-term) Blocking peptide - Images

## NDUFV1 Antibody(N-term) Blocking peptide - Background

The mitochondrial respiratory chain provides energy tocells via oxidative phosphorylation and consists of fourmembrane-bound electron-transporting protein complexes (I-IV) andan ATP synthase (complex V). This gene encodes a 51 kDa subunit ofthe NADH:ubiquinone oxidoreductase complex I; a large complex withat least 45 nuclear and mitochondrial encoded subunits thatliberates electrons from NADH and channels them to ubiquinone. Thissubunit carries the NADH-binding site as well as flavinmononucleotide (FMN)- and Fe-S-biding sites. Defects in complex Iare a common cause of mitochondrial dysfunction; a syndrome thatoccurs in approximately 1 in 10,000 live births. Mitochondrialcomplex I deficiency is linked to myopathies, encephalomyopathies,and neurodegenerative disorders such as Parkinson's disease andLeigh syndrome. Alternative splicing results in multiple transcriptvariants encoding distinct isoforms.

## NDUFV1 Antibody(N-term) Blocking peptide - 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) :