

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: <http://www.uniprot.org/citations/28844695> target="_blank">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: <http://www.uniprot.org/citations/28844695> target="_blank">28844695). Contains FMN, which is the initial electron acceptor as well as one iron-sulfur cluster (PubMed: <http://www.uniprot.org/citations/28844695> target="_blank">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) 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 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) 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) :