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NDUFV1 Antibody(N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19414a

Product Information

Application	WB, E
Primary Accession	P49821
Other Accession	Q91YT0, Q8HXQ9, P25708, NP_009034.2
Reactivity	Human
Predicted	Bovine, Monkey, Mouse, Rat, Canine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40529
Calculated MW	50817
Antigen Region	21-50

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.

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}

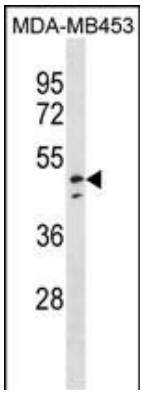
Background

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.

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) :

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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.