Recombinant Human NDUFV1

Cat. No. NDUFV1-29479TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment of Human NDUFV1 with N-terminal proprietary tag. Predicted MW 36.63 kDa.
Species	Human
Source	Wheat Germ
ProteinLength	100 amino acids
Description	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 Parkinsons disease and Leigh syndrome. Alternative splicing results in multiple transcript variants encoding distinct isoforms.
Molecular Weight	36.630kDa inclusive of tags
Form	Liquid

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Purity	Proprietary Purification
Storage buffer	pH: 8.00Constituents:0.3% Glutathione, 0.79% Tris HCl
Storage	Shipped on dry ice. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequences of amino acids	KAIARLIEFYKHESCGQCTPCREGVDWMNKVMARFVRGDARPAEIDSLWEISKQIEG HTICALGDGAAWPVQGLIRHFRPELEERMQRFAQQHQARQAAS
Sequence Similarities	Belongs to the complex I 51 kDa subunit family.

GENE INFORMATION

Gene Name	NDUFV1 NADH dehydrogenase (ubiquinone) flavoprotein 1, 51kDa [Homo sapiens]
Official Symbol	NDUFV1
Synonyms	NDUFV1; NADH dehydrogenase (ubiquinone) flavoprotein 1, 51kDa; NADH dehydrogenase (ubiquinone) flavoprotein 1 (51kD); NADH dehydrogenase [ubiquinone] flavoprotein 1, mitochondrial; CI 51K; complex I 51kDa subunit; NADH dehydrogenase [ubiquinone] flavoprot
Gene ID	4723
mRNA Refseq	NM_001166102
Protein Refseq	NP_001159574
MIM	161015

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Uniprot ID	P49821
Chromosome Location	11q13
Pathway	Alzheimers disease, organism-specific biosystem; Alzheimers disease, conserved biosystem; Electron Transport Chain, organism-specific biosystem; Huntingtons disease, organism-specific biosystem; Huntingtons disease, conserved biosystem;
Function	4 iron, 4 sulfur cluster binding; FMN binding; NAD binding; NADH dehydrogenase (ubiquinone) activity; NADH dehydrogenase activity;

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