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Product datasheet for RC200223

NDUFB9 (NM_005005) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NDUFB9 (NM_005005) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NDUFB9
Synonyms:	B22; CI-B22; LYRM3; MC1DN24; UQOR22
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC200223 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGTTCTTGGCGTCGGGACCCTACCTGACCCATCAGCAAAAGGTGTTGCGGCTTTATAAGCGGGCGC
TACGCCACCTCGAGTCGTGGTGCGTCCAGAGAGACAAATACCGATACTTTGCTTGTTTGATGAGAGCCCG
GTTTGAAGAACATAAGAATGAAAAGGATATGGCGAAGGCCACCCAGCTGCTGAAGGAGGCCGAGGAAGAA
TTCTGGTACCGTCAGCATCCACAGCCATACATCTTCCCTGACTCTCCTGGGGGCACCTCCTATGAGAGAT
ACGATTGCTACAAGGTCCCAGAATGGTGCTTAGATGACTGGCATCCTTCTGAGAAGGCAATGTATCCTGA
TTACTTTGCCAAGAGAGAACAGTGGAAGAAACTGCGGAGGGAAAGCTGGGAACGAGAGGTTAAGCAGCTG
CAGGAGGAAACGCCACCTGGTGGTCCTTTAACTGAAGCTTTGCCCCCTGCCCGAAAGGAAGGTGATTTGC
CCCCACTGTGGTGGTATATTGTGACCAGACCCCGGGAGCGGCCCATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200223 protein sequence
Red=Cloning site Green=Tags(s)

MAFLASGPYLTHQQKVLRLYKRALRHLESWCVQRDKYRYFACLMRARFEEHKNEKDMAKATQLLKEAEEE
FWYRQHPQPYIFPDSPGGTSYERYDCYKVPEWCLDDWHPSEKAMYPDYFAKREQWKKLRRESWEREVKQL
QEETPPGGPLTEALPPARKEGDLPPLWWYIVTRPRERPM

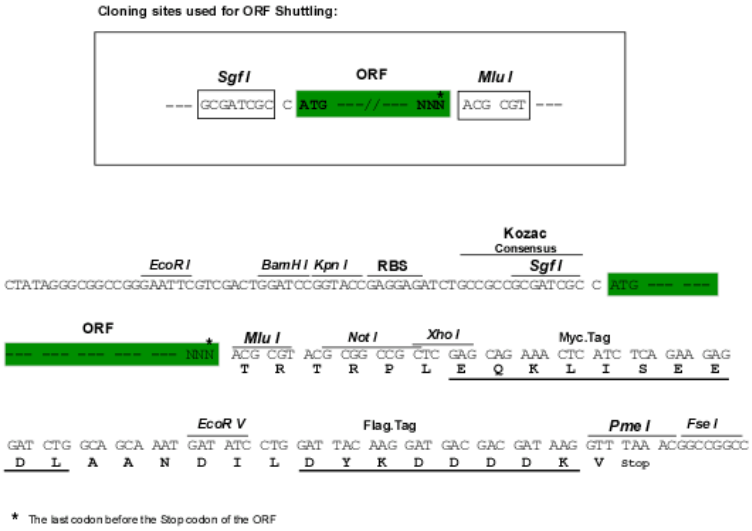
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6381_b10.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005005

ORF Size: 537 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: NM_005005.3

RefSeq Size: 736 bp

RefSeq ORF: 540 bp

Locus ID: 4715

UniProt ID: Q9Y6M9

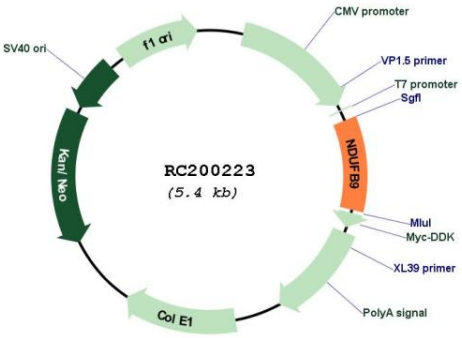
Cytogenetics: 8q24.13

Protein Pathways: Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease

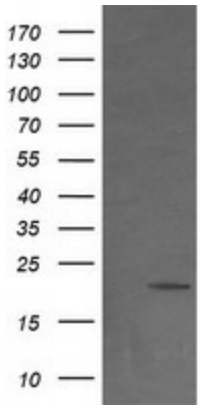
MW: 21.8 kDa

Gene Summary: The protein encoded by this gene is a subunit of the mitochondrial oxidative phosphorylation complex I (nicotinamide adenine dinucleotide: ubiquinone oxidoreductase). Complex I is localized to the inner mitochondrial membrane and functions to dehydrogenate nicotinamide adenine dinucleotide and to shuttle electrons to coenzyme Q. Complex I deficiency is the most common defect found in oxidative phosphorylation disorders and results in a range of conditions, including lethal neonatal disease, hypertrophic cardiomyopathy, liver disease, and adult-onset neurodegenerative disorders. Pseudogenes of this gene are found on chromosomes five, seven and eight. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2015]

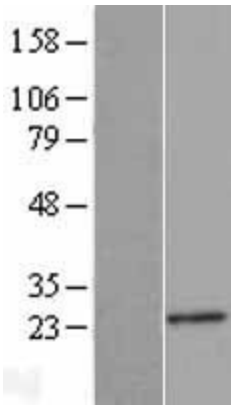
Product images:



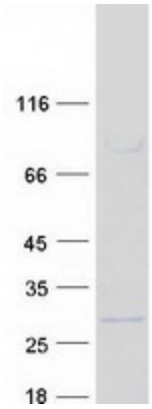
Circular map for RC200223



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NDUFB9 (Cat# RC200223, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NDUFB9 (Cat# [TA502568]). Positive lysates [LY417578] (100ug) and [LC417578] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417578]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200223 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NDUFB9 protein (Cat# [TP300223]). The protein was produced from HEK293T cells transfected with NDUFB9 cDNA clone (Cat# RC200223) using MegaTran 2.0 (Cat# [TT210002]).