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Product datasheet for RC201988

NDUFB3 (NM_002491) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NDUFB3 (NM_002491) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NDUFB3
Synonyms:	B12; CI-B12; MC1DN25
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201988 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC ATGGCCCATGAACATGGACATGAGCATGGACATCATAAAATGGAACTTCCAGATTATAGACAATGGAAGA TAGAAGGGACACCATTAGAAACTATCCAGAAGAAGCTGGCTGCAAAAGGGCTAAGGGATCCATGGGGCCG CAATGAAGCTTGGAGATACATGGGTGGCTTTGCAAAGAGTGTTTCCTTTTCTGATGTATTCTTTAAAGGA TTCAAATGGGGATTTGCTGCATTTGTGGTAGCTGTAGGAGCTGAATATTACCTGGAGTCCCTGAATAAAG ATAAGAAGCATCAC ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA
Protein Sequence:	>RC201988 protein sequence Red=Cloning site Green=Tags(s) MAHEHGHEHGHHKMELPDYRQWKIEGTPLETIQKKLAAKGLRDPWGRNEAWRYMGGFAKSVSFSDVFFKG FKWGFAAFVVAVGAEYYLESLNKDKKHH TRTRPLEQKLISEEDLAANDILDYKDDDDKV
Chromatograms:	https://cdn.origene.com/chromatograms/mk6304_g06.zip
Restriction Sites:	SgfI-MluI

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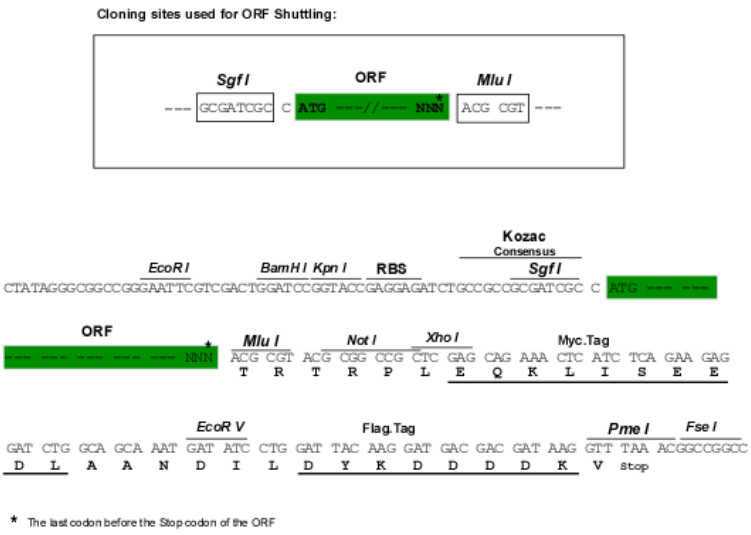
Cloning Scheme:



ACCN:	NM_002491
ORF Size:	294 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_002491.3
RefSeq Size:	770 bp
RefSeq ORF:	297 bp
Locus ID:	4709

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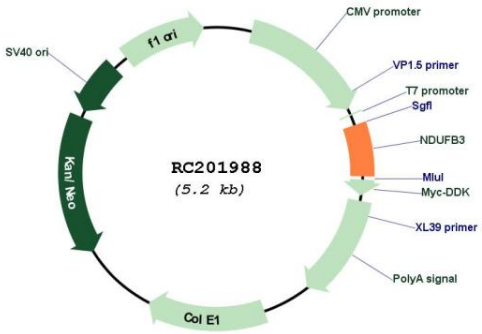
UniProt ID:	O43676
Cytogenetics:	2q33.1
Protein Families:	Transmembrane
Protein Pathways:	Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
MW:	11.4 kDa
Gene Summary:	This gene encodes an accessory subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I) which is the first enzyme in the electron transport chain of mitochondria. This protein localizes to the inner membrane of the mitochondrion as a single-pass membrane protein. Mutations in this gene contribute to mitochondrial complex 1 deficiency. Alternative splicing results in multiple transcript variants encoding the same protein. Humans have multiple pseudogenes of this gene. [provided by RefSeq, Mar 2012]

Product images:



Circular map for RC201988

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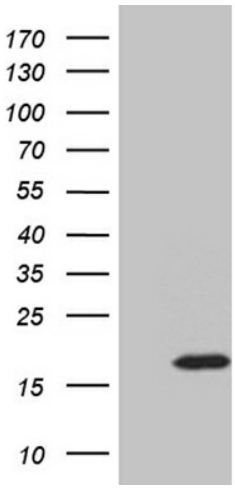
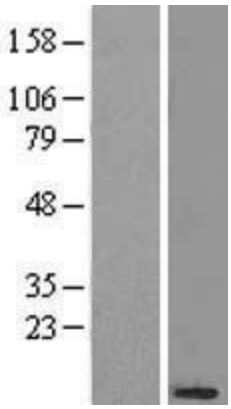


HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY NDUFB3 (Cat# RC201988, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-NDUFB3 (1:500) (Cat# [TA810666]). Positive lysates [LY419291] (100ug) and [LC419291] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY419291]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201988 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

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