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Product datasheet for RC200653

NDUFV2 (NM_021074) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NDUFV2 (NM_021074) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NDUFV2
Synonyms:	CI-24k; MC1DN7
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC200653 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTCTTCTCCGCGGCGCTCCGGGCCCGGGCGGCTGGCCTCACCGCCCACTGGGGAAGACATGTAAGGA
ATTTGCATAAGACAGTTATGCAAAATGGAGCTGGAGGAGCTTTATTTGTGCACAGAGATACTCCTGAGAA
TAACCCTGATACTCCATTTGATTTCACACCAGAAAACTATAAGAGGATAGAGGCAATTGTAAAAAACTAT
CCAGAAGGCCATAAAGCAGCAGCTGTTCTTCCAGTCCTGGATTTAGCCCAAAGGCAGAATGGGTGGTTGC
CCATCTCTGCTATGAACAAGGTTGCAGAAGTTTTACAAGTACCTCCAATGAGAGTATATGAAGTAGCAAC
TTTTTATACAATGTATAATCGAAAGCCAGTTGGAAAGTATCACATTCAGGTCTGCACTACTACACCCTGC
ATGCTTCGAAACTCTGACAGCATACTGGAGGCCATTCAGAAAAAGCTTGGAATAAAGGTTGGGGAGACTA
CACCTGACAAACTTTTCACTCTTATAGAAGTGGAATGTTTAGGGGCCTGTGTGAACGCACCAATGGTTCA
AATAAATGACAATTACTATGAGGATTTGACAGCTAAGGATATTGAAGAAATTATTGATGAGCTCAAGGCT
GGCAAAATCCCAAAACCAGGGCCAAGGAGTGGACGCTTCTCTTGTGAGCCAGCTGGAGGTCTTACCTCTT
TGACTGAACCACCCAAGGGACCTGGATTTGGTGTACAAGCAGGCCTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC200653 protein sequence
Red=Cloning site Green=Tags(s)

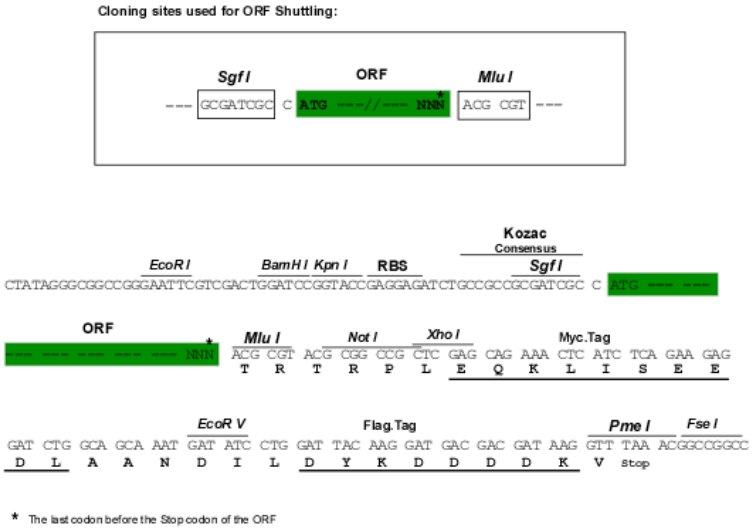
MFFSAALRARAAGLTAHWGRHVRNLHKTVMQNGAGGALFVHRDTPENNPDTPFDFTPENYKRIEAIVKNY
PEGHKAAAVLPVLDLAQRQNGWLPISAMNKVAEVLQVPPMRVYEVATFYTMYNRKPVGKYHIQVCTTTPC
MLRNSDSILEAIQKKLGIKVGETTPDKLFTLIEVECLGACVNAPMVQINDNYYEDLTAKDIEEIIDELKA
GKIPKPGPRSGRFSCEPAGGLTSLTEPPKGPGFGVQAGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6393_b04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021074

ORF Size: 747 bp

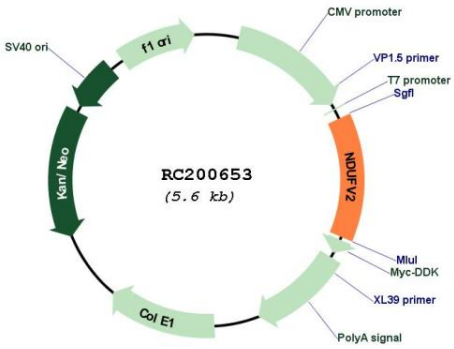
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

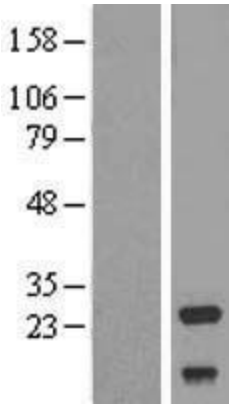
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_021074.5
RefSeq Size:	937 bp
RefSeq ORF:	750 bp
Locus ID:	4729
UniProt ID:	P19404
Cytogenetics:	18p11.22
Domains:	complex1_24kD
Protein Families:	Druggable Genome
Protein Pathways:	Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
MW:	27.4 kDa
Gene Summary:	The NADH-ubiquinone oxidoreductase complex (complex I) of the mitochondrial respiratory chain catalyzes the transfer of electrons from NADH to ubiquinone, and consists of at least 43 subunits. The complex is located in the inner mitochondrial membrane. This gene encodes the 24 kDa subunit of complex I, and is involved in electron transfer. Mutations in this gene are implicated in Parkinson's disease, bipolar disorder, schizophrenia, and have been found in one case of early onset hypertrophic cardiomyopathy and encephalopathy. A non-transcribed pseudogene of this locus is found on chromosome 19. [provided by RefSeq, Oct 2009]

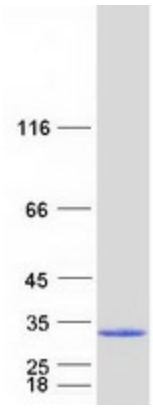
Product images:



Circular map for RC200653



Western blot validation of overexpression lysate (Cat# [LY412099]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200653 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NDUFV2 protein (Cat# [TP300653]). The protein was produced from HEK293T cells transfected with NDUFV2 cDNA clone (Cat# RC200653) using MegaTran 2.0 (Cat# [TT210002]).