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Product datasheet for RC200061

NDUFA8 (NM_014222) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NDUFA8 (NM_014222) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NDUFA8
Synonyms:	CI-19KD; CI-PGIV; MC1DN37; PGIV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC200061 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCGGGGATAGTGGAGCTGCCCACTCTAGAGGAGCTGAAAGTAGATGAGGTGAAAATTAGTTCTGCTG
TGCTTAAAGCTGCGGCCCATCACTATGGAGCTCAATGTGATAAGCCCAACAAGGAATTTATGCTCTGCCG
CTGGGAAGAGAAAGATCCGAGGCGGTGTTTAGAGGAAGGCAAACTGGTCAACAAGTGTGCTTTGGACTTC
TTTAGGCAGATAAAACGTCACTGTGCAGAGCCTTTTACAGAATATTGGACTTGCATTGATTATACTGGCC
AGCAGTTATTTCGTCACTGTCGCAAACAGCAGGCAAAGTTTGACGAGTGTGTGCTGGACAAACTGGGCTG
GGTGCGGCCTGACCTGGGAGAACTGTCAAAGGTCACCAAAGTGAAAACAGATCGACCTTTACCGGAGAAT
CCCTATCACTCAAGACCAAGACCGGATCCCAGCCCTGAGATCGAGGGAGATCTGCAGCCTGCCACACATG
GCAGCCGCTTTTATTTCTGGACCAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC200061 protein sequence
Red=Cloning site Green=Tags(s)

MPGIVELPTLEELKVDEVKISSAVLKAAAHHYGAQCDKPNKEFMLCRWEEKDPRRCLEEGKLVNKCALDF
FRQIKRHCAEPFTEYWTCIDYTGQQLFRHCRKQQAKFDECVLDKLGWVRPDLGELSKVTKVKTDRPLPEN
PYHSRPRPDPSPEIEGDLQPATHGSRFYFWTK

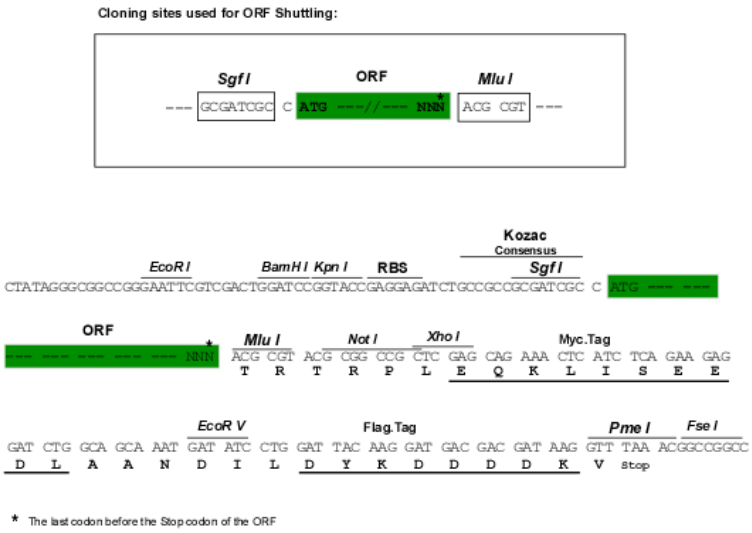
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6399_h11.zip

View online »

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014222

ORF Size: 516 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_014222.1

RefSeq Size: 859 bp

RefSeq ORF: 519 bp

Locus ID: 4702

UniProt ID: P51970

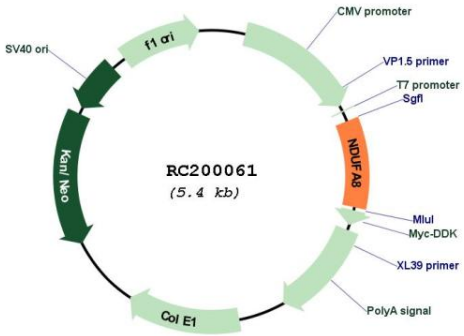
Cytogenetics: 9q33.2

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

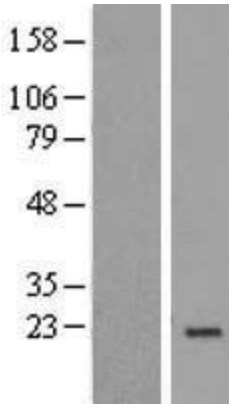
MW: 20.1 kDa

Gene Summary: The protein encoded by this gene belongs to the complex I 19 kDa subunit family. Mammalian complex I is composed of 45 different subunits. This protein has NADH dehydrogenase activity and oxidoreductase activity. It plays an important role in transfering electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Dec 2015]

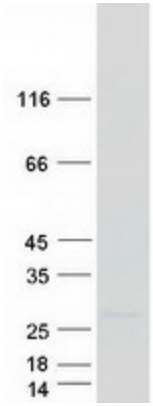
Product images:



Circular map for RC200061



Western blot validation of overexpression lysate (Cat# [LY415437]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200061 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NDUFA8 protein (Cat# [TP300061]). The protein was produced from HEK293T cells transfected with NDUFA8 cDNA clone (Cat# RC200061) using MegaTran 2.0 (Cat# [TT210002]).