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Product datasheet for RC202915

NDUFV3 (NM_021075) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NDUFV3 (NM_021075) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NDUFV3
Synonyms:	CI-9KD; CI-10k
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC202915 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTGCCCCGTGTTTGCTGCGGCAAGGACGAGCCGGGGCGCTGAAGACTATGCTCCAGGAAGCCCAGG
TGTTTCGAGGACTTGCTTCTACGGTTTCTTTGTCTGCGGAATCAGGGAAGAGTGAAAAGGGTCAGCCACA
GAATTCCAAGAAGCAAAGTCCACCAAAAAATGTAGTGGAACCAAAGGAGAGGGGCAAGCTCCTAGCCACC
CAGACAGCAGCTGAATTGTCTAAAAACTTATCTTCACCCAGTTCTTACCCGCCAGCTGTGAATAAGGGCA
GGAAGGTAGCTAGTCCCAGTCCCAGTGGCAGCGTGCTATTCACAGATGAAGGGGTTCCGAAATTTTTGTC
AAGAAAGACTTTGGTAGAGTTTCCACAGAAAGTTCTGTCTCCATTCAGAAAACAGGGCTCTGATTCAGAA
GCTCGTCAGGTGGGTCGGAAAGTGACGTCGCCTTCGTCTTCATCCTCGTCCAGCTCCTCTGATTCTGAAT
CTGATGATGAGGCTGACGTTTCAGAGGTCACTCCTCGAGTGGTGAGCAAAGGCAGAGGGGGGCTTCGAAA
ACCAGAGGCCTCTCATTCCTTTGAAAACAGAGCCCCCCGAGTTACAGTATCAGCAAAAGAGAAAACCTTG
CTGCAGAAGCCGCATGTGGACATTACTGATCCAGAGAAGCCCCACCAGCCAAAGAAGAAAGGGTCCCCTG
CTAAGCCATCAGAAGGCAGGGAAAATGCGAGACCAAAAACCACAATGCCCAGATCTCAAGTAGATGAAGA
GTTTTTGAAGCAAAGTTTAAAGGAAAAACAATTGCAGAAAACATTTAGATTAAATGAAATAGATAAAGAA
AGCCAAAAGCCATTTGAAGTTAAAGGACCCTTACCTGTCCACACAAAATCAGGGTTGTCTGCGCCACCGA
AGGGCAGCCCAGCGCCTGCTGTGTTGGCAGAAGAGGCCAGAGCAGAGGGGCAGCTGCAAGCCAGTCCTCC
TGGGGCGGCAGAGGGGCATCTGGAAAAACCCGTGCCAGAGCCCCAGCGCAAGGCGGCCCCTCCCCTGCCC
AGAAAGGAAACCTCAGGGACGCAGGGAATAGAAGGCCACCTGAAGGGTGGACAGGCAATCGTGGAAGATC
AGATACCACCAAGCAATTTGGAGACAGTTCCTGTTGAGAATAACCACGGTTTCCATGAAAAGACAGCAGC
GCTGAAGCTTGAGGCCGAGGGCGAGGCCATGGAAGATGCAGCCGCGCCAGGGAACGACCGAGGCGGCACA
CAGGAGCCAGCCCCAGTGCCTGCTGAGCCGTTTGACAACACTACCTACAAGAACCTGCAGCATCATGACT
ACAGCACGTACACCTTCTTAGACCTCAACCTCGAACTCTCAAAATTCAGGATGCCTCAGCCCTCCTCAGG
CCGGGAGTCACCTCGACAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC202915 protein sequence
Red=Cloning site Green=Tags(s)

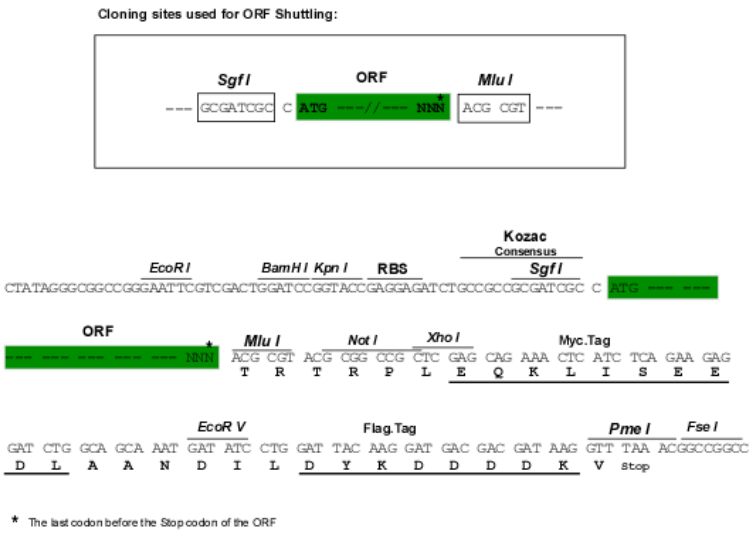
MAAPCLLRQGRAGALKTMLQEAQVFRGLASTVSLSAESGKSEKGQPQNSKKQSPPKNVVEPKERGKLLAT
QTAAELSKNLSSPSSYPPAVNKGRKVASPSPSGSVLFTDEGVPKFLSRKTLVEFPQKVLSPFRKQGSDSE
ARQVGRKVTSPSSSSSSSSSDSESDDEADVSEVTPRVVSKGRGGLRKPEASHSFENRAPRVTVSAKEKTL
LQKPHVDITDPEKPHQPKKKGSPAKPSEGRENARPKTTMPRSQVDEEFLKQSLKEKQLQKTFRLNEIDKE
SQKPFEVKGPLPVHTKSGLSAPPKGSPAPAVLAEEARAEGQLQASPPGAAEGHLEKPVPEPQRKAAPPLP
RKETSGTQGIEGHLKGGQAIVEDQIPPSNLETVPVENNHGFHEKTAALKLEAEGEAMEDAAAPGNDRGGT
QEPAPVPAEPFDNTTYKNLQHHDYSTYTFLDLNLELSKFRMPQPSSGRESPRH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6575_a01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_021075

ORF Size: 1419 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_021075.3, NP_066553.3

RefSeq Size: 2151 bp

RefSeq ORF: 1422 bp

Locus ID: 4731

UniProt ID: P56181

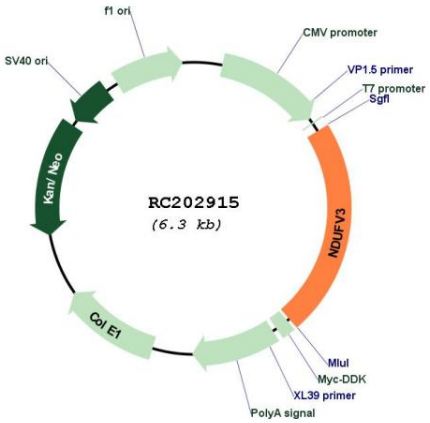
Cytogenetics: 21q22.3

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

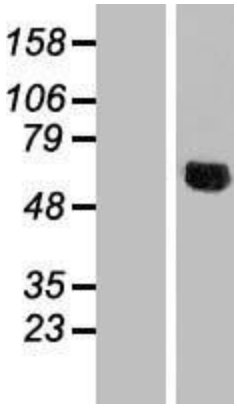
MW: 51 kDa

Gene Summary: The protein encoded by this gene is one of at least forty-one subunits that make up the NADH-ubiquinone oxidoreductase complex. This complex is part of the mitochondrial respiratory chain and serves to catalyze the rotenone-sensitive oxidation of NADH and the reduction of ubiquinone. The encoded protein is one of three proteins found in the flavoprotein fraction of the complex. The specific function of the encoded protein is unknown. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

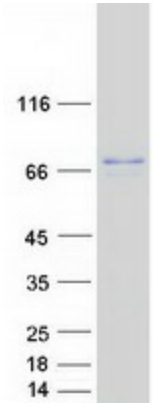
Product images:



Circular map for RC202915



Western blot validation of overexpression lysate (Cat# [LY412100]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202915 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NDUFV3 protein (Cat# [TP302915]). The protein was produced from HEK293T cells transfected with NDUFV3 cDNA clone (Cat# RC202915) using MegaTran 2.0 (Cat# [TT210002]).