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Product datasheet for MR203147

Ndufv2 (NM_028388) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ndufv2 (NM_028388) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ndufv2
Synonyms:	2900010C23Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR203147 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTCTCCTTGGCGCTGCGGGCCAGGGCGACCGGCCTCGCTGCTCAGTGGGGAAGACATGCAAGGAATT
TGCATAAGACAGCAGTGCACAATGGTGCTGGAGGAGCCTTATTTGTGCATAGAGATACTCCTGAGAATAA
CCCAGATACTCCATTTGATTTCACACCAGAAAACTATAAGAGGATAGAGGCAATAGTAAAAAACTACCCA
GAAGGGCATCAAGCCGCTGCTGTGCTTCCAGTCCTGGATCTCGCCCAAAGGCAGAATGGATGGCTACCTA
TCTCCGCTATGAACAAGGTGGCTGAAGTTTTACAAGTACCTCCAATGAGAGTATATGAAGTAGCAACTTT
TTATACAATGTATAATCGAAAGCCAGTTGGGAAGTACCATATCCAGGTCTGCACTACTACACCTTGCATG
CTGCGAGATTCTGACAGCATATTGGAGACCCTTCAGAGAAAGCTTGGAATAAAGGTTGGAGAGACTACAC
CTGACAAACTTTTCACTCTTATAGAAGTGGAATGTTTAGGGGCCTGTGTAAATGCACCGATGGTTCAAAT
AAATGACAACTACTATGAGGATCTGACACCCAAGGATATTGAAGAGATTATTGATGAACTCAAAGCTGGA
AAAGTTCCCAAACCAGGGCCAAGGAGTGGCCGCTTCTGTTGTGAGCCAGCTGGAGGCCTTACTTCTTTGA
CTGAACCACCCAAAGGACCTGGCTTTGGTGTGCAAGCAGGCCTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

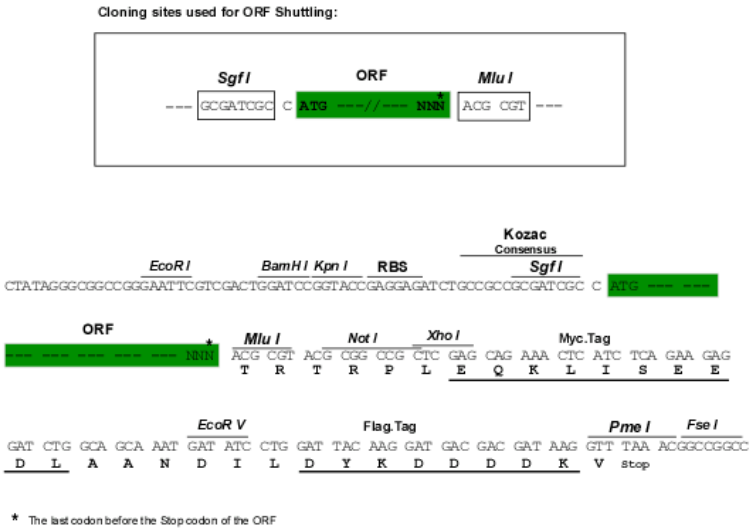
>MR203147 protein sequence
Red=Cloning site Green=Tags(s)

MFSLALRARATGLAAQWGRHARNLHKTAVHNGAGGALFVHRDTPENNPDTPFDFTPENYKRIEAIVKNYP
EGHQAAAVLPVLDLAQRQNGWLPISAMNKVAEVLQVPPMRVYEVATFYTMYNRKPVGKYHIQVCTTTPCM
LRDSDSILETLQRKLGIKVGETTPDKLFTLIEVECLGACVNAPMVQINDNYYEDLTPKDIEEIIDELKAG
KVPKPGPRSGRFCCEPAGGLTSLTEPPKGPGFGVQAGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_028388

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.

RefSeq: NM_028388.3, NP_082664.1

RefSeq Size: 1540 bp

RefSeq ORF: 747 bp

Locus ID: 72900

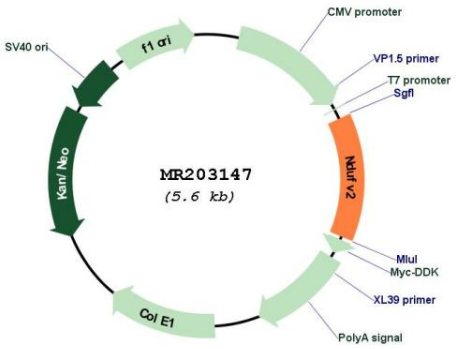
UniProt ID: Q9D6J6

Cytogenetics: 17 E1.1

MW: 27.3 kDa

Gene Summary: This gene encodes a subunit of the NADH-ubiquinone oxidoreductase (complex I) enzyme, which is a large, multimeric protein. It is the first enzyme complex in the mitochondrial electron transport chain and catalyzes the transfer of electrons from NADH to the electron acceptor ubiquinone. The proton gradient created by electron transfer drives the conversion of ADP to ATP. This gene is a core subunit and is conserved in prokaryotes and eukaryotes. The bovine ortholog of this protein has been characterized and is reported to contain an iron-sulfur cluster, which may be involved in electron transfer. In humans 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 pseudogene of this gene is located on chromosome 3. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jun 2013]

Product images:



Circular map for MR203147