

## Product datasheet for **MR219229**

### **Ndufs1 (NM\_001160040) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Ndufs1 (NM_001160040) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ndufs1
Synonyms:	5830412M15Rik; 9930026A05Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>MR219229 ORF sequence  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGCATCGCC**

ATGTTAAGGATACCTATAAAAAGGGCCTTGATAGGCCCTTCTAATTCTCCTAAAGGATATGTTTCGCACAA  
CTGGCACAGCAGCAAGTAACTTGATTGAAGTATTTGTTGATGGTCAGTCTGTCATGGTGGAAACCAGGAAC  
CACTGTTCTGCAGGCTTTCGAGAAAGGTCGGCATGCAAATCCCTCGATTCTGTTACCATGAAAGGTTGTCT  
GTTGCTGGAAATTGCAGGATGTGCCTGGTAGAGATTGAGAAAGCTCCAAAGGTTGTCTGCTTGTGCTA  
TGCCTGTAATGAAGGGCTGGAATATCTTGACAACTCGGAAAAATCTAAGAAAGCCAGAGAAGGTGTGAT  
GGAGTTCTTATTAGCAAATCACCCATTGGATTGCCTATTTGTGACCAGGGAGGTGAATGTGATCTGCAG  
GACCAGTCCATGATGTTTGAAGTGATAGGAGCCGATTTCTAGAGGGGAAGCGTGTCTGGAGGACAAGA  
ACATTGGGCCCTAGTAAAGACCATCATGACTAGATGCATCCAGTGTACCCGGTGCATCAGGTTTGAAG  
TGAGATTGCAGGAGTAGATGATTTGGGAACAACAGGAAGAGGAAATGACATGCAAGTTGGCACATACATT  
GAAAAAATGTTTTATGCTGAACTGTCTGGGAATGTCATTGATATCTGCCCTGTAGGGGCCCTAACCTCTA  
AGCCTTATGCCTTACTGCCCGCCTTGGGAAACAAGAAAGACAGAGTCCATTGATGTAATGGATGCAGT  
GGGAAGTAACATTGTGGTTAGCACAAGAACTGGAGAGGTAATGAGGATTTTGCCAAGAATGCATGAAGAT  
ATTAATGAAGAATGGATCTCTGATAAAAACAGGTTTGCTTATGATGGACTAAAACGTCAAAGACTTACTG  
AACCAATGGTCAGAAACGAAAAAGGGCTTTAACTTATACCTCCTGGGAAGATGCACTCTCTCGTGTAGC  
TGAATGTTACAGAAATTTGAAGCAATGCTGTGGCAGCGATTGCAGGAGGCTTGGTGGATGCTGAAGCC  
TTAGTAGCTCTGAAAGACTTGCTTAATAAAGTTGACTCTGACAACCTTATGCACTGAAGAGATCTTCCCA  
CTGAAGGAGCTGGTACAGACTTACGTTCCAATTATCTTCTCAATACCACAATTGCTGGTGGAAAGAGC  
AGATGTTGTTCTTCTAGTTGGTACAAATCCACGTTTTGAGGCACCGCTGTTAATGCTAGAATTAGAAAG  
AGCTGGCTTCATAATGACTTAAAAGTGGCCTCATCGGTAGTCCAGTGGACCTCACTTACAGATACGACC  
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TCCAGGGGCTGCTTACACAGAAAAGTCTGCTACTTATGTCAATACTGAGGGCAGAGCTCAGCAAACCAA  
AGTAGCAGTGACGCCCTCTGGCTTGGCAGCAGAAAGACTGGAAAATCATAAGAGCTCTCTGAGATTGCA  
GGTATCACTCTTCCATATGACACTCTGGATCAAGTAAGGAACCGTCTTGAAGAGGCTCTCTCCTAATCTGG  
TTCGATATGATGATATTGAAGAACTAATTACTTTTTCAGCAAGCAAGTGAAGTGGCAAGCTAGTAAACCA  
GGAGGTTCTTGTGACCCACTCGTTCCACCTCAGCTAACTATAAAAAGACTTCTATATGACAGACTCCATT  
AGCAGAGCCTCACAGACAATGGCCAAGTGTGTCAAAGCTGTCACCGAGGGCGCTCAGGCAGTAGAGGAGC  
CGTCCATATGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
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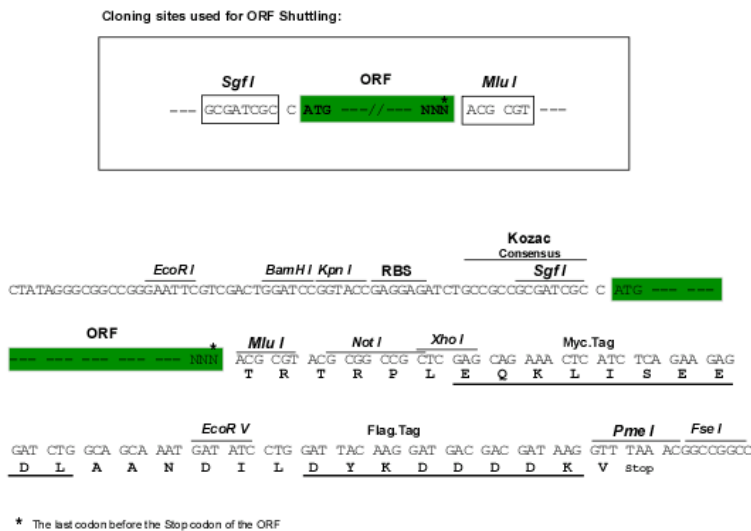
**Protein Sequence:** >MR219229 protein sequence  
Red=Cloning site Green=Tags(s)

MLRIPIKRALIGLSNSPKGYVRTTGTAAASNLIEVFVDGQSVMEVPGTTVLQACEKVGMIIPRFCYHERLS  
VAGNCRMCLVEIEKAPKVVAACAMPVMKGNILTNSEKSKKAREGVMEFLLANHPLDCPICDQGGECDLQ  
DQSMFMFGSDRSRFLLEGKRAVEDKNIGPLVKTIMTRCIQCTRCIRFASEIAGVDDLTTGRNDMQVGTYYI  
EKMFMSSELSGNVIDICPVGALTSKPYAFTARPWETRKTESIDVMDAVGSNIIVVSTRTGEVMRILPRMHED  
INEEWISDKTRFAYDGLKRQRLTEPMVRNEKGLLTYTSWEDALSRVAGMLQNFEGNAAAAIAGGLVDAEA  
LVALKDLLNKVSDNLCTEEIFPTEGAGTDLRSNYLLNTTIAGVEEADVLLVGTNPRFEAPLFNARIRK  
SWLHNDLKVALLIGSPVDLTYRYDHLGDSPKILQDIASGRHSFCEVLKDAKKPMVVLGSSALQRDDGAAIIL  
VAVSNMVQKIRVTTGVAAEWKVMNHLHRIASQVAALDLGYKPGVEAIRKNPPKMLFLLGADGGCITRQDL  
PKDCFIVYQGHGVDVGAPMADVILPGAAYTEKSATYVNTTEGRAQQTKVAVTPPLAREDWKIIIRALSEIA  
GITLPYDTLDQVRNRLEEVSPLVRYDDIEETNYFQQASELAKLVNQEVLADPLVPPQLTIKDFYMTDSI  
SRASQTMKACVKAVTEGAQAVEEPSIC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001160040

**ORF Size:** 2181 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\\_001160040.1](#), [NP\\_001153512.1](#)

**RefSeq Size:** 2832 bp

**RefSeq ORF:** 2184 bp

**Locus ID:** 227197

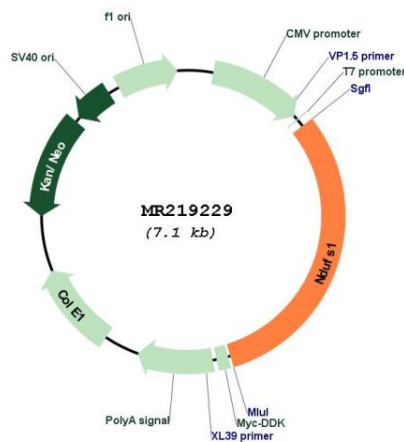
**UniProt ID:** [Q91VD9](#)

**Cytogenetics:** 1 C2

**MW:** 79.8 kDa

**Gene Summary:** Core subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I) that is believed to belong to the minimal assembly required for catalysis. Complex I functions in the transfer of electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone (By similarity). This is the largest subunit of complex I and it is a component of the iron-sulfur (IP) fragment of the enzyme. It may form part of the active site crevice where NADH is oxidized (By similarity). [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR219229