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# Product datasheet for MR210318

## Ndufs1 (NM_145518) Mouse Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | Ndufs1 (NM_145518) 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) |

**ORF Nucleotide Sequence:**

>MR210318 representing NM_145518
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTAAGGATACCTATAAAAAGGGCCTTGATAGGCCTTTCTAATTCTCCTAAAGGATATGTTCGCACAA
CTGGCACAGCAGCAAGTAACTTGATTGAAGTATTTGTTGATGGTCAGTCTGTCATGGTGGAACCAGGAAC
CACTGTTCTGCAGGCTTGCGAGAAGGTCGGCATGCAAATCCCTCGATTCTGTTACCATGAAAGGTTGTCT
GTTGCTGGAAATTGCAGGATGTGCCTGGTAGAGATTGAGAAAGCTCCAAAGGTTGTCGCTGCTTGTGCTA
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GGAGTTCTTATTAGCAAATCACCCATTGGATTGTCCTATTTGTGACCAGGGAGGTGAATGTGATCTGCAG
GACCAGTCCATGATGTTTGGAAGTGATAGGAGCCGATTTCTAGAGGGGAAGCGTGCTGTGGAGGACAAGA
ACATTGGGCCCCTAGTAAAGACCATCATGACTAGATGCATCCAGTGTACCCGGTGCATCAGGTTTGCAAG
TGAGATTGCAGGAGTAGATGATTTGGGAACAACAGGAAGAGGAAATGACATGCAAGTTGGCACATACATT
GAAAAAATGTTTATGTCTGAACTGTCTGGGAATGTCATTGATATCTGCCCTGTAGGGGCCCTAACCTCTA
AGCCTTATGCCTTTACTGCCCGGCCTTGGGAAACAAGAAAGACAGAGTCCATTGATGTAATGGATGCAGT
GGGAAGTAACATTGTGGTTAGCACAAGAACTGGAGAGGTAATGAGGATTTTGCCAAGAATGCATGAAGAT
ATTAATGAAGAATGGATCTCTGATAAAACCAGGTTTGCTTATGATGGACTAAAACGTCAAAGACTTACTG
AACCAATGGTCAGAAACGAAAAAGGGCTTTTAACTTATACCTCCTGGGAAGATGCACTCTCTCGTGTAGC
TGGAATGTTACAGAATTTTGAAGGCAATGCTGTGGCAGCGATTGCAGGAGGCTTGGTGGATGCTGAAGCC
TTAGTAGCTCTGAAAGACTTGCTTAATAAAGTTGACTCTGACAACTTATGCACTGAAGAGATCTTCCCCA
CTGAAGGAGCTGGTACAGACTTACGTTCCAATTATCTTCTCAATACCACAATTGCTGGTGTGGAAGAAGC
AGATGTTGTTCTTCTAGTTGGTACAAATCCACGTTTTGAGGCACCGCTGTTTAATGCTAGAATTAGAAAG
AGCTGGCTTCATAATGACTTAAAAGTGGCCCTCATCGGTAGTCCAGTGGACCTCACTTACAGATACGACC
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GTAGCTGTGTCCAACATGGTACAAAAGATTCGAGTGACAACCGGTGTTGCTGCAGAGTGGAAAGTTATGA
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TAGGAAGAACCCTCCCAAAATGCTGTTTCTTCTGGGAGCAGATGGAGGTTGTATCACGCGACAGGACTTG
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TCCCAGGGGCTGCTTACACAGAAAAGTCTGCTACTTATGTCAATACTGAGGGCAGAGCTCAGCAAACCAA
AGTAGCAGTGACGCCTCCTGGCTTGGCACGAGAAGACTGGAAAATCATAAGAGCTCTCTCTGAGATTGCA
GGTATCACTCTTCCATATGACACTCTGGATCAAGTAAGGAACCGTCTTGAAGAGGTCTCTCCTAATCTGG
TTCGATATGATGATATTGAAGAAACTAATTACTTTCAGCAAGCAAGTGAGCTTGCCAAGCTAGTAAACCA
GGAGGTTCTTGCTGACCCACTCGTTCCACCTCAGCTAACTATAAAAGACTTCTATATGACAGACTCCATT
AGCAGAGCCTCACAGACAATGGCCAAGTGTGTCAAAGCTGTCACCGAGGGCGCTCAGGCAGTAGAGGAGC
CGTCCATATGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR210318 representing NM_145518
Red=Cloning site Green=Tags(s)

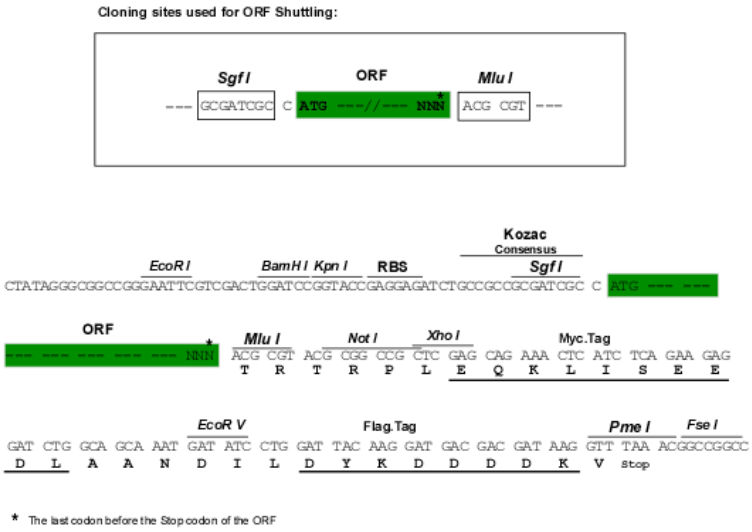
MLRIPIKRALIGLSNSPKGYVRTTGTAASNLIEVFVDGQSVMVEPGTTVLQACEKVGMQIPRFCYHERLS
VAGNCRMCLVEIEKAPKVVAACAMPVMKGWNILTNSEKSKKAREGVMEFLLANHPLDCPICDQGGECDLQ
DQSMMFGSDRSRFLEGKRAVEDKNIGPLVKTIMTRCIQCTRCIRFASEIAGVDDLGTTGRGNDMQVGTYI
EKMFMSELSGNVIDICPVGALTSKPYAFTARPWETRKTESIDVMDAVGSNIVVSTRTGEVMRILPRMHED
INEEWISDKTRFAYDGLKRQRLTEPMVRNEKGLLTYTSWEDALSRVAGMLQNFEGNAVAAIAGGLVDAEA
LVALKDLLNKVDSDNLCTEEIFPTEGAGTDLRSNYLLNTTIAGVEEADVVLLVGTNPRFEAPLFNARIRK
SWLHNDLKVALIGSPVDLTYRYDHLGDSPKILQDIASGRHSFCEVLKDAKKPMVVLGSSALQRDDGAAIL
VAVSNMVQKIRVTTGVAAEWKVMNILHRIASQVAALDLGYKPGVEAIRKNPPKMLFLLGADGGCITRQDL
PKDCFIVYQGHHGDVGAPMADVILPGAAYTEKSATYVNTEGRAQQTKVAVTPPGLAREDWKIIRALSEIA
GITLPYDTLDQVRNRLEEVSPNLVRYDDIEETNYFQQASELAKLVNQEVLADPLVPPQLTIKDFYMTDSI
SRASQTMAKCVKAVTEGAQAVEEPSIC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** https://cdn.origene.com/chromatograms/mm9098_e04.zip

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_145518

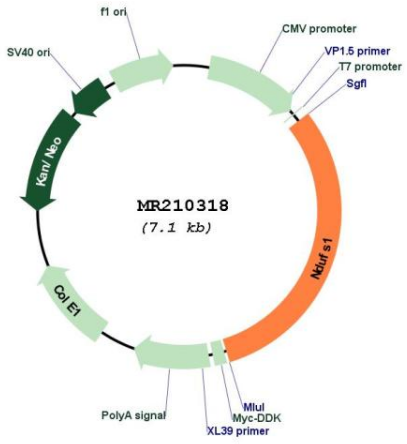
**ORF Size:** 2181 bp

**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.<br>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.<br>3. Close the tube and incubate for 10 minutes at room temperature.<br>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.<br>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_145518.2, NP_663493.2 |
| **RefSeq Size:** | 2674 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 MR210318