

Product datasheet for **MG218499**

Ndufs1 (NM_001160039) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ndufs1 (NM_001160039) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ndufs1
Synonyms:	5830412M15Rik; 9930026A05Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG218499 representing NM_001160039
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGTTAAGGATACCTATAAAAAGGGCCTTGATAGGCCTTTCTAATTCTCCTAAAGGATATGTTTCGCACAA
CTGGCACAGCAGCAAGTAACTTGATTGAAGTATTTGTTGATGGTCAGTCTGTCATGGTGAACCAGGAAC
CACTGTTCTGCAGGCTTGCAGAGAAGGTCGGCATGCAAATCCCTCGATTCTGTTACCATGAAAGGTTGTCT
GTTGCTGGAAATTGCAGGATGTGCCTGGTAGAGATTGAGAAAGCTCCAAAGGTTGTCGCTGCTTGTGCTA
TGCCTGTAATGAAGGGCTGGAATATCTTGACAACTCGGAAAAATCTAAGAAAGCCAGAGAAGGTGTGAT
GGAGTTCTTATTAGCAAATCACCCATTGGATTGCCTATTTGTGACCAGGGAGGTGAATGTGATCTGCAG
GACCAGTCCATGATGTTTGAAGTGATAGGAGCCGATTTCTAGAGGGGAAGCGTGTGTGGAGGACAAGA
ACATTGGGCCCTAGTAAAGACCATCATGACTAGATGCATCCAGTGTACCCGGTGCATCAGGTTTGAAG
TGAGATTGCAGGAGTAGATGATTTGGGAACAACAGGAAGAGGAAATGACATGCAAGTTGGCACAACATT
GAAAAATGTTTTATGTCTGAACTGTCTGGGAATGTCATTGATATCTGCCCTGTAGGGGCCCTAACCTCTA
AGCCTTATGCCTTACTGCCCGCCTTGGGAAACAAGAAAGACAGAGTCCATTGATGTAATGGATGCAGT
GGGAAGTAAACATTGTGGTTAGCACAAGAAGTGGAGAGGTAATGAGGATTTTGCCAAGAATGCATGAAGAT
ATTAATGAAGAATGGATCTCTGATAAAAACAGGTTTGCTTATGATGGACTAAAACGTCAAAGACTTACTG
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TGAAGTGTACAGAAATTTGAAGGCAATGCTGTGGCAGCGATTGCAGGAGGCTTGGTGGATGCTGAAGCC
TTAGTAGCTCTGAAAGACTTGCTTAATAAAGTTGACTCTGACAACCTATGCACTGAAGAGATCTTCCCA
CTGAAGGAGCTGGTACAGACTTACGTTCCAATTATCTTCTCAATACCACAATTGCTGGTGGAAAGAGC
AGATGTTGTTCTTCTAGTTGGTACAAATCCACGTTTTGAGGCACCGCTGTTTAAATGCTAGAATTAGAAAG
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AGTAGCAGTGACGCCCTCTGGCTTGGCAGCAGAGAAGACTGGAAAATCATAAGAGCTCTCTGAGATTGCA
GGTATCACTCTTCCATATGACACTCTGGATCAAGTAAGGAACCGTCTTGAAGAGGCTCTCTCCTAATCTGG
TTCGATATGATGATATTGAAGAACTAATTACTTTTCCAGCAAGCAAGTGAAGTGGCAAGCTAGTAAACCA
GGAGGTTCTTGTGACCCACTCGTTCCACCTCAGCTAACTATAAAAAGACTTCTATATGACAGACTCCATT
AGCAGAGCCTCACAGACAATGGCCAAGTGTGCAAGCTGTCACCGAGGGCGCTCAGGCAGTAGAGGAGC
CGTCCATATGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG218499 representing NM_001160039
 Red=Cloning site Green=Tags(s)

MLRIPIKRALIGLSNSPKGYVRTTGTAAASNLIEVFVDGQSVMEVPGTTVLQACEKVGMIIPRFCYHERLS
 VAGNCRMCLVEIEKAPKVVAAACAMPVMKGWNILTNSEKSKKAREGVMEFLLANHPLDCPICDQGGECDLQ
 DQSMFMGSDRSRFLLEGKRAVEDKNIGPLVKTIMTRCIQCTRCIRFASEIAGVDDLTTGRNDMQVGTIYI
 EKMFMSSELSGNVIDICPVGALTSKPYAFTARPWETRKTESIDVMDAVGSNIIVVSTRTGEVMRILPRMHED
 INEEWISDKTRFAYDGLKRQRLTEPMVRNEKGLLTYTSWEDALSRVAGMLQNFEQNAVAAIAGGLVDAEA
 LVALKDLLNKVSDNLCTEEIFPTEGAGTDLRSNYLLNTTIAGVEEADVLLVGTNPRFEAPLFNARIRK
 SWLHNDLKVALLIGSPVDLTYRYDHLGDSPKILQDIASGRHSFCEVLKDAKKPMVVLGSSALQRDDGAAAIL
 VAVSNMVQKIRVTTGVAAEAWVMNHLHRIASQVAALDLGYKPGVEAIRKNPPKMLFLLGADGGCITRQDL
 PKDCFIVYQGHGHDVGAPMADVILPGAAYTEKSATYVNTTEGRAQQTKVAVTPPLAREDWKIIIRALSEIA
 GITLPYDITLDQVRNRLEEVSPLVRYDDIEETNYFQQASELAKLVNQEVLADPLVPPQLTIKDFYMTDSI
 SRASQTMKCVKAVTEGAQAVEEPSIC

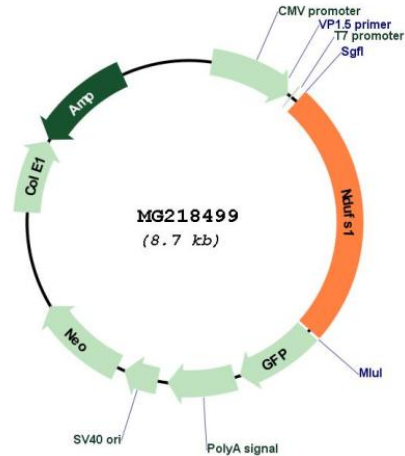
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_001160039

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_001160039.1](#), [NP_001153511.1](#)

RefSeq Size: 2778 bp

RefSeq ORF: 2184 bp

Locus ID: 227197

UniProt ID: [Q91VD9](#)

Cytogenetics: 1 C2

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]