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Product datasheet for MG217060

Ndufs1 (NM_001160038) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ndufs1 (NM_001160038) 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)

ORF Nucleotide Sequence:

>MG217060 representing NM_001160038
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTAAGGATACCTATAAAAAGGGCCTTGATAGGCCTTTCTAATTCTCCTAAAGGATATGTTCGCACAA
CTGGCACAGCAGCAAGTAACTTGATTGAAGTATTTGTTGATGGTCAGTCTGTCATGGTGGAACCAGGAAC
CACTGTTCTGCAGGCTTGCGAGAAGGTCGGCATGCAAATCCCTCGATTCTGTTACCATGAAAGGTTGTCT
GTTGCTGGAAATTGCAGGATGTGCCTGGTAGAGATTGAGAAAGCTCCAAAGGTTGTCGCTGCTTGTGCTA
TGCCTGTAATGAAGGGCTGGAATATCTTGACAAACTCGGAAAAATCTAAGAAAGCCAGAGAAGGTGTGAT
GGAGTTCTTATTAGCAAATCACCCATTGGATTGTCCTATTTGTGACCAGGGAGGTGAATGTGATCTGCAG
GACCAGTCCATGATGTTTGGAAGTGATAGGAGCCGATTTCTAGAGGGGAAGCGTGCTGTGGAGGACAAGA
ACATTGGGCCCCTAGTAAAGACCATCATGACTAGATGCATCCAGTGTACCCGGTGCATCAGGTTTGCAAG
TGAGATTGCAGGAGTAGATGATTTGGGAACAACAGGAAGAGGAAATGACATGCAAGTTGGCACATACATT
GAAAAAATGTTTATGTCTGAACTGTCTGGGAATGTCATTGATATCTGCCCTGTAGGGGCCCTAACCTCTA
AGCCTTATGCCTTTACTGCCCGGCCTTGGGAAACAAGAAAGACAGAGTCCATTGATGTAATGGATGCAGT
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CTGAAGGAGCTGGTACAGACTTACGTTCCAATTATCTTCTCAATACCACAATTGCTGGTGTGGAAGAAGC
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TCCCAGGGGCTGCTTACACAGAAAAGTCTGCTACTTATGTCAATACTGAGGGCAGAGCTCAGCAAACCAA
AGTAGCAGTGACGCCTCCTGGCTTGGCACGAGAAGACTGGAAAATCATAAGAGCTCTCTCTGAGATTGCA
GGTATCACTCTTCCATATGACACTCTGGATCAAGTAAGGAACCGTCTTGAAGAGGTCTCTCCTAATCTGG
TTCGATATGATGATATTGAAGAAACTAATTACTTTCAGCAAGCAAGTGAGCTTGCCAAGCTAGTAAACCA
GGAGGTTCTTGCTGACCCACTCGTTCCACCTCAGCTAACTATAAAAGACTTCTATATGACAGACTCCATT
AGCAGAGCCTCACAGACAATGGCCAAGTGTGTCAAAGCTGTCACCGAGGGCGCTCAGGCAGTAGAGGAGC
CGTCCATATGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

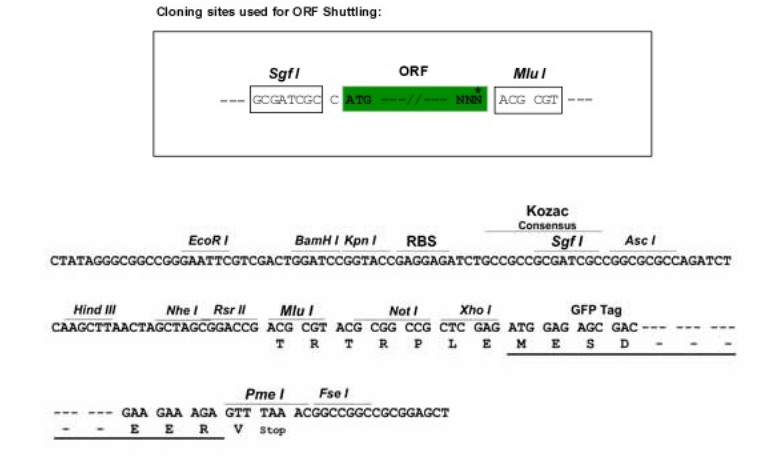
>MG217060 representing NM_001160038
Red=Cloning site Green=Tags(s)

MLRIPIKRALIGLSNSPKGYVRTTGTAASNLIEVFVDGQSVMVEPGTTVLQACEKVGMQIPRFCYHERLS
VAGNCRMCLVEIEKAPKVVAACAMPVMKGWNILTNSEKSKKAREGVMEFLLANHPLDCPICDQGGECDLQ
DQSMMFGSDRSRFLEGKRAVEDKNIGPLVKTIMTRCIQCTRCIRFASEIAGVDDLGTTGRGNDMQVGTYI
EKMFMSELSGNVIDICPVGALTSKPYAFTARPWETRKTESIDVMDAVGSNIVVSTRTGEVMRILPRMHED
INEEWISDKTRFAYDGLKRQRLTEPMVRNEKGLLTYTSWEDALSRVAGMLQNFEGNAVAAIAGGLVDAEA
LVALKDLLNKVDSDNLCTEEIFPTEGAGTDLRSNYLLNTTIAGVEEADVVLLVGTNPRFEAPLFNARIRK
SWLHNDLKVALIGSPVDLTYRYDHLGDSPKILQDIASGRHSFCEVLKDAKKPMVVLGSSALQRDDGAAIL
VAVSNMVQKIRVTTGVAAEWKVMNILHRIASQVAALDLGYKPGVEAIRKNPPKMLFLLGADGGCITRQDL
PKDCFIVYQGHHGDVGAPMADVILPGAAYTEKSATYVNTEGRAQQTKVAVTPPGLAREDWKIIRALSEIA
GITLPYDTLDQVRNRLEEVSPNLVRYDDIEETNYFQQASELAKLVNQEVLADPLVPPQLTIKDFYMTDSI
SRASQTMAKCVKAVTEGAQAVEEPSIC

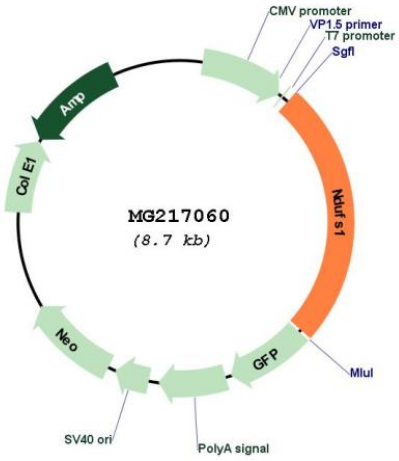
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_001160038
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_001160038.1, NP_001153510.1
RefSeq Size:	2936 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]