

## **Product datasheet for MC225940**

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## Ndufv2 (NM 001278415) Mouse Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Ndufv2 (NM\_001278415) Mouse Untagged Clone

Tag: Tag Free Symbol: Ndufv2

**Synonyms:** 2900010C23Rik

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

Fully Sequenced ORF: >MC225940 representing NM\_001278415

Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

**GCCGCGATCGCC** 

CCCAAAGGACCTGGCTTTGGTGTGCAAGCAGGCCTTTAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** Sgfl-Mlul

**ACCN:** NM 001278415

**Insert Size:** 459 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).



## Ndufv2 (NM\_001278415) Mouse Untagged Clone - MC225940

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal

tag.

**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:** <u>NM 001278415.1, NP 001265344.1</u>

 RefSeq Size:
 1637 bp

 RefSeq ORF:
 459 bp

 Locus ID:
 72900

 UniProt ID:
 Q9D6]6

 Cytogenetics:
 17 E1.1

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]

Transcript Variant: This variant (2) differs in the 5' UTR and 5' coding region and uses a downstream start codon, compared to variant 1. The encoded isoform (2) has a shorter N-

terminus, compared to isoform 1.