

Product datasheet for MR200458

Ndufa7 (NM 023202) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Ndufa7 (NM_023202) Mouse Tagged ORF Clone

Tag: Myc-DDK
Symbol: Ndufa7

Synonyms: 14.5kD; 14.5kDa; 2400007M02Rik; CI-B14.5a

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

Cell Selection: Neomycin

ORF Nucleotide >MR200458 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

CAGTGACACCTGCTCCCATGAAGAGGTGGGAGCTGTCCAAGGACCAGCCATACCTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAG**GTTTAA**

Protein Sequence: >MR200458 protein sequence

Red=Cloning site Green=Tags(s)

MASATRVIQKLRNWASGQDLQAKLQLRYQEIAKRTQPPPKLPVGPSHKLSNNYYCTRDGRREVVPPSIIM

SSQKALVSGKAAESSAMAATEKKAVTPAPPMKRWELSKDQPYL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-Mlul



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

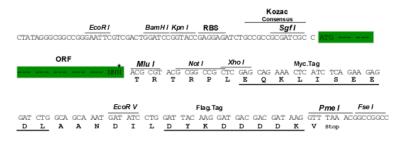
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



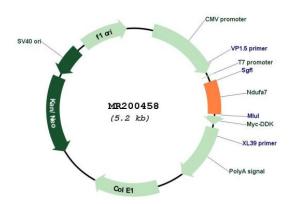
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_023202

ORF Size: 342 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: <u>NM 023202.4</u>

 RefSeq Size:
 540 bp

 RefSeq ORF:
 342 bp

 Locus ID:
 66416

 UniProt ID:
 Q9Z1P6

 Cytogenetics:
 17 B1

 MW:
 12.6 kDa

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. Complex I has been biochemically separated into four fractions. The bovine ortholog of this protein has been reported to be part of the I-lambda fraction, which forms the extrinsic globular domain. In humans, deficiencies in complex I are associated with myopathies, encephalomyopathies, and neurodegenerative disorders. Pseudogenes of this gene are located on chromosomes 7 and 16. Alternative splicing results in multiple transcript

variants. [provided by RefSeq, May 2013]