

## Product datasheet for **RC229501**

### NDUFA2 (NM\_001185012) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** NDUFA2 (NM\_001185012) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** NDUFA2  
**Synonyms:** B8; CD14; CIB8; MC1DN13  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >RC229501 representing NM\_001185012  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

**ATGGCGGCGCCGCGAGCAAGTCGAGGAGTCGGGGCAAAGCTGGGCTGCGTGAGATTCGCATCCACTTAT**  
**GTCAGCGCTCGCCCGGCAGCCAGGGCGTCAGGGACTTCATTGAGAAACGCTACGTGGAGCTGAAGAAGGC**  
**GAATCCCACCTACCCATCCTAATCCGGAATGCTCCGATGTGCAGCCCAAGCTCTGGGCCGCTACGCC**  
**TCCAGGGTGCAGAATAGT**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC229501 representing NM\_001185012  
Red=Cloning site Green=Tags(s)

MAAAAASRVGAKLGLREIRIHLQSRSPGSQGVRFIEKRYVELKKNPDLPIIRECSDVQPKLWARYA  
SRVQNS

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** Sgfl-MluI

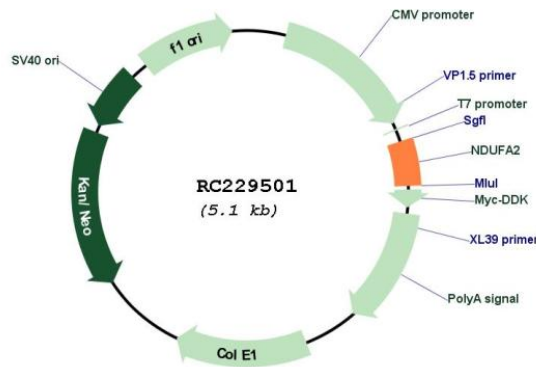


[View online »](#)

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001185012

ORF Size: 228 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](#)

|                               |   |
|-------------------------------|---|
| <b>OTI Annotation:</b>        | This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.  |
| <b>Components:</b>            | 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).  |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>                                   |
| <b>RefSeq:</b>                | <u>NM_001185012.1, NP_001171941.1</u>   |
| <b>RefSeq ORF:</b>            | 231 bp  |
| <b>Locus ID:</b>              | 4695  |
| <b>UniProt ID:</b>            | <u>O43678</u>   |
| <b>Cytogenetics:</b>          | 5q31.3  |
| <b>Protein Pathways:</b>      | Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease   |
| <b>MW:</b>                    | 8.9 kDa   |
| <b>Gene Summary:</b>          | The encoded protein is a subunit of the hydrophobic protein fraction of the NADH:ubiquinone oxidoreductase (complex 1), the first enzyme complex in the electron transport chain located in the inner mitochondrial membrane, and may be involved in regulating complex I activity or its assembly via assistance in redox processes. Mutations in this gene are associated with Leigh syndrome, an early-onset progressive neurodegenerative disorder. Alternative splicing results in multiple transcript variants.[provided by RefSeq, May 2010] |