

## Product datasheet for **RG202713**

### NDUFS4 (NM\_002495) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** NDUFS4 (NM\_002495) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** NDUFS4  
**Synonyms:** AQDQ; CI-18; CI-18 kDa; CI-AQDQ; MC1DN1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG202713 representing NM\_002495  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGC**C

ATGGCGCGGTCTCAATGTCAGTGGTACTGAGGCAGACGTTGTGGCGGAGAAGGGCAGTGGCTGTAGCTG  
 CCCTTTCCGTTTCCAGGGTTCCGACCAGGTCGTTGAGGACTTCCTCATGGAGATTGGCACAGGACCAGAC  
 TCAAGACACAACACTATAACAGTTGATGAAAAATTGGATCACTACTTTAACTGGCGTCCAGAAGAG  
 CATATAAAAACTAGAAAAGTCAGGATCTTTGTTCTGCTGCAATAACATGCAGTCTGGAGTAAACAACA  
 CAAAGAAATGGAAGATGGAGTTTGATACCAGGGAGCGATGGGAAAATCCTTTGATGGGTTGGGCATCAAC  
 GGCTGATCCCTTATCCAACATGGTTCTAACCTCAGTACTAAAGAAGATGCAGTTTCCTTTGCAGAAAAA  
 AATGGATGGAGCTATGACATTGAAGAGAGGAAGGTTCCAAAACCAAGTCCAAGTCTTATGGTGCAAACT  
 TTTCTTGAACAAAAGAACAAGAGTATCCACAAAA

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG202713 representing NM\_002495  
 Red=Cloning site Green=Tags(s)

MAVSMVVLRLQTLWRRRAVAVALSVSRVPTRSLRTSSWRLAQDQTQDTQLITVDEKLDITTLTGVPPEE  
 HIKTRKVRIFVPARNMQSGVNNTKKWKMEFDTRERWENPLMGWASTADPLSNMVLTFSTKEDAVSFAEK  
 NGWSYDIEERKVPKPKSKSYGANFVSWNKRTRVSTK

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_002495

**ORF Size:** 525 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\\_002495.1](#), [NP\\_002486.1](#)

**RefSeq Size:** 668 bp

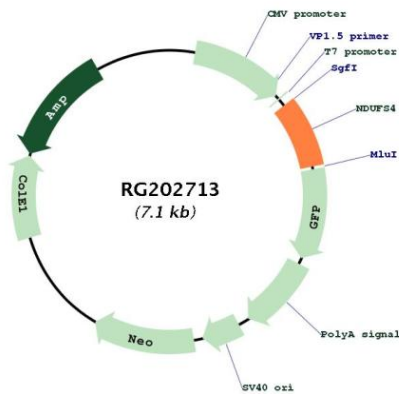
**RefSeq ORF:** 528 bp

**Locus ID:** 4724

**UniProt ID:** [O43181](#)

**Cytogenetics:** 5q11.2  
**Domains:** ETC\_CI\_21  
**Protein Families:** Druggable Genome  
**Protein Pathways:** Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease  
**Gene Summary:** This gene encodes an nuclear-encoded accessory subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (complex I, or NADH:ubiquinone oxidoreductase). Complex I removes electrons from NADH and passes them to the electron acceptor ubiquinone. Mutations in this gene can cause mitochondrial complex I deficiencies such as Leigh syndrome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2015]

**Product images:**



Circular map for RG202713