

Product datasheet for **RG203279**

NDUFS7 (NM_024407) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NDUFS7 (NM_024407) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: NDUFS7
Synonyms: CI-20; CI-20KD; MC1DN3; MY017; PSST
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG203279 representing NM_024407
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGCGGTGCTGTCAGCTCCTGGCCTGCGCGGCTTCCGGATCCTTGGTCTGCGCTCCAGCGTGGGCCTGG
 CTGTGCAGGCACGAGGTGCCATCAGAGCGTGGCCACCGATGGCCCAAGCAGCACCCAGCCTGCCCTGCC
 AAAGGCCAGAGCCGTGGCTCCAAACCCAGCAGCCGGGGCGAGTATGTGGTGGCCAAGCTGGATGACCTC
 GTCAACTGGGCCC GCCGAGTTCTGTGGCCATGACCTTCGGCCTGGCCTGCTGCGCCGTGGAGATGA
 TGCACATGGCAGCACCCGCTACGACATGGACCGCTTTGGCGTGGTCTTCCGCGCCAGCCCGCGCCAGTC
 CGACGTATGATCGTGGCCGGCACACTACCAACAAGATGGCCCCAGCGCTTCGCAAGGTCTACGACCAG
 ATGCCGGAGCCGCGCTACGTGGTCTCCATGGGGAGCTGCGCCAACGGAGGAGGCTACTACCACTATTCCT
 ACTCGGTGGTGGGGGCTGCGACCGCATCGTGCCCGTGGACATCTACATCCCAGGCTGCCACCTACGGC
 CGAGGCCCTGCTCTACGGCATCCTGCAGCTGCAGAGGAAGATCAAGCGGGAGCGGAGGCTGCAGATCTGG
 TACCGCAGG

ACGCGTACGCGGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG203279 representing NM_024407
Red=Cloning site Green=Tags(s)

MAVLSAPGLRGFRILGLRSSVGLAVQARGVHQSVATDGPSTQPALPKARAVAPKPSRGEYVVAKLDDL
 VNWARRSSLWPMTFGLACCAVEMMHMAAPRYDMDFGVVFRASPRQSDVMIVAGTLTNKMAPALRKVYDQ
 MPEPRYVYVSMGSCANGGGYHYYSVVRGCDRIVPVDIYIPGCPPTAEALLYGILQLQRKIKRERRLQIW
 YRR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_024407

ORF Size: 639 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_024407.3](#), [NP_077718.2](#)

RefSeq Size: 787 bp

RefSeq ORF: 642 bp

Locus ID: 374291

UniProt ID: [O75251](#)

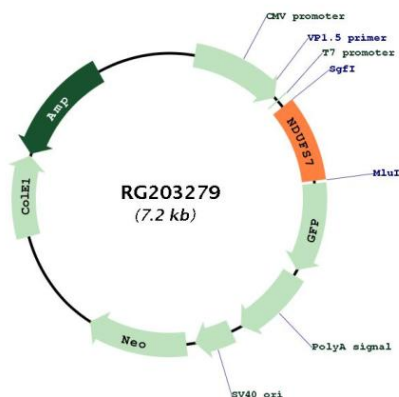
Cytogenetics: 19p13.3

Domains: oxidored_q6

Protein Pathways: Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease

Gene Summary: This gene encodes a protein that is a subunit of one of the complexes that forms the mitochondrial respiratory chain. This protein is one of over 40 subunits found in complex I, the nicotinamide adenine dinucleotide (NADH):ubiquinone oxidoreductase. This complex functions in the transfer of electrons from NADH to the respiratory chain, and ubiquinone is believed to be the immediate electron acceptor for the enzyme. Mutations in this gene cause Leigh syndrome due to mitochondrial complex I deficiency, a severe neurological disorder that results in bilaterally symmetrical necrotic lesions in subcortical brain regions. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG203279