

Product datasheet for **RG229501**

NDUFA2 (NM_001185012) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NDUFA2 (NM_001185012) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: NDUFA2
Synonyms: B8; CD14; CIB8; MC1DN13
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG229501 representing NM_001185012
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCGGCCGCGAGCAAGTCGAGGAGTCGGGGCAAAGCTGGGCCTGCGTGAGATTGCGATCCACTTAT
GTCAGCGCTCGCCGGCAGCCAGGGCGTCAGGGACTTCATTGAGAAACGCTACGTGGAGCTGAAGAAGGC
GAATCCCGACCTACCCATCCTAATCCGGAATGCTCCGATGTGCAGCCAAAGCTCTGGGCCCGCTACGCC
TCCAGGGTGCAGAATAGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG229501 representing NM_001185012
Red=Cloning site Green=Tags(s)
MAAAAASRGVGAKLGLREIRIHLQKRSQGVDFIEKRYVELKKNPDLPIIIRECSDVQPKLWARYA
SRVQNS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

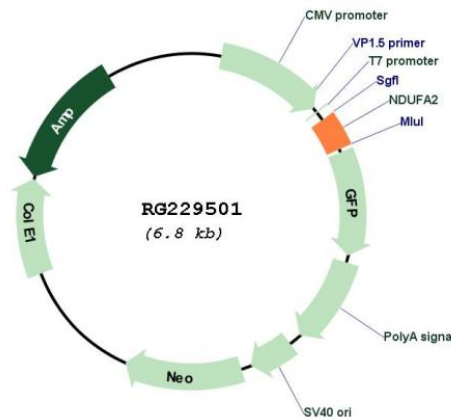


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Cloning Scheme:



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](#)

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:	<ol style="list-style-type: none">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_001185012.1</u> , <u>NP_001171941.1</u>
RefSeq Size:	773 bp
RefSeq ORF:	231 bp
Locus ID:	4695
UniProt ID:	<u>O43678</u>
Cytogenetics:	5q31.3
Protein Pathways:	Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
Gene Summary:	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]