

Product datasheet for **RG231772**

NDUFB5 (NM_001199958) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NDUFB5 (NM_001199958) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: NDUFB5
Synonyms: CISGDH; SGDH
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG231772 representing NM_001199958
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGCCATGAGTTTGTTCGGCGGGTTTCGGTTACTGCGGTGGCAGCTCTGTCTGGCCGGCCCTTG
GCACTCGCTCGGATTTGGGGCTTCTCACTCGTGGCTTCCGAAGGCTGCTGCTCCTGTTGACACAG
TGGAGACCATGGGAAAAGACTATTTGTCATCAGACCTTAGATTCTATGACAGGCGTTTTTTGAAGTTA
TTGAGATTCTACATTGCATTGACTGGGATTCCAGTAGCAATTTTCATAACTCTGGTGAATGTATTCATTG
GTCAAGCTGAAGTAGCAGAAATCCAGAAGGCTATGTCCAGAACACTGGGAATATTATAAGGGTAAAGG
AGCTGGAAGTGGAAAATTGATGCATGTGAGAGGAGATGGACCCTGGTATTACTA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG231772 representing NM_001199958
Red=Cloning site Green=Tags(s)
MAAMSLRRVSVTAVAALSGRPLGTRLGFGGFLTRGFPKAAAPVRHSGDHGKRLFVIRPSRFYDRRFLKL
LRFYIALTGIPVAIFITLVNVFIGQAEIAEIPGYVPEHWEYKKGKAGSAKIDACERRWTLVLL

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

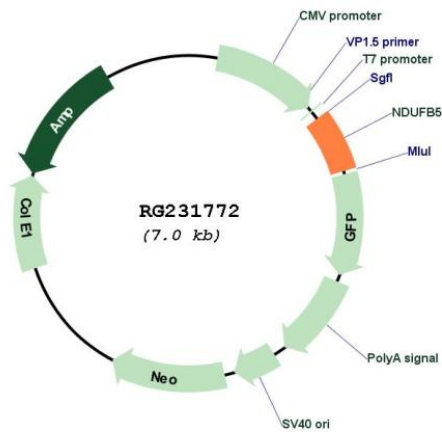


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Cloning Scheme:



Plasmid Map:



ACCN: NM_001199958

ORF Size: 405 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_001199958.1</u> , <u>NP_001186887.1</u>
RefSeq Size:	969 bp
RefSeq ORF:	408 bp
Locus ID:	4711
UniProt ID:	<u>O43674</u>
Cytogenetics:	3q26.33
Protein Families:	Transmembrane
Protein Pathways:	Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
Gene Summary:	The protein encoded by this gene is a subunit of the multisubunit NADH:ubiquinone oxidoreductase (complex I). Mammalian complex I is composed of 45 different subunits. It locates at the mitochondrial inner membrane. This protein has NADH dehydrogenase activity and oxidoreductase activity. It transfers electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone. Three transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2011]