

## Product datasheet for **RG235486**

### NDUFA5 (NM\_001282422) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** NDUFA5 (NM\_001282422) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** NDUFA5  
**Synonyms:** B13; CI-13kB; CI-13KD-B; NUFM; UQOR13  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG235486 representing NM\_001282422.  
Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG  
 GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC  
ATGGCGGGTGTGCTGAAGAAGACCACTGGCCTTGTGGGATTGGCTGTGTGCAATACTCCTCACGAGGAA  
CCAGATGTTAAAAAATTAGAAGACCACTTCAAGGCGGTCAATTAGAAGAGGTGATTCTTCAGGCTGAA  
CATGAATAAATCTGGCAAGAAAAATGAGGGAATGGAACTATGGGAGCCATTAGTGAAGAGCCTCT  
GCCGATCAGTGGAAATGGCCAATA  
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC

**Protein Sequence:** >Peptide sequence encoded by RG235486  
Blue=ORF Red=Cloning site Green=Tag(s)

MAGVLKKTGLVGLAVCNTPHEEPDVKKLEDQLQGGQLEEVILQAEHELNLARKMREWKLWEPLVEEPP  
ADQWKWPI  
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV  
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA  
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**


**ACCN:** NM\_001282422

**ORF Size:** 231 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).

**RefSeq:** [NM\\_001282422.2](#), [NP\\_001269351.1](#)

**RefSeq Size:** 5485 bp

**RefSeq ORF:** 234 bp

**Locus ID:** 4698

**UniProt ID:** [Q16718](#)

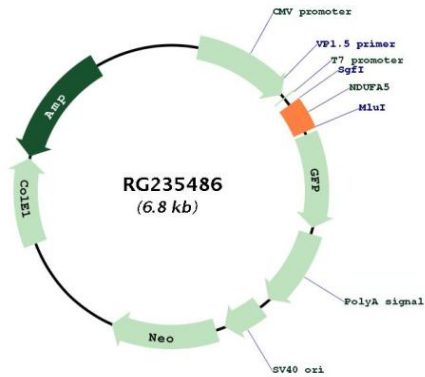
**Cytogenetics:** 7q31.32

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

MW: 9.3 kDa

**Gene Summary:** This nuclear gene encodes a conserved protein that comprises the B13 subunit of complex I of the mitochondrial respiratory chain. The encoded protein localizes to the inner mitochondrial membrane, where it is thought to aid in the transfer of electrons from NADH to ubiquinone. Alternative splicing results in multiple transcript variants. There are numerous pseudogenes of this gene on chromosomes 1, 3, 6, 8, 9, 11, 12, and 16. [provided by RefSeq, Apr 2014]

**Product images:**



Circular map for RG235486