

Product datasheet for **RG235698**

NDUFA5 (NM_001282421) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NDUFA5 (NM_001282421) 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: >RG235698 representing NM_001282421.
Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTTAGTGAACCGTCAGAATTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCCTTACCGGACCACTGGCCTTGTTGGGATTGGCTGTGTGCAATACTCCTCACGAGAGGCTAAGAATA
TTGTACACAAAGATTCTTGATGTTCTTGAGGAAATCCCTAAAAATGCAGCATATAGAAAGTACAGAA
CAGATTACAAATGAGAAGCTGGCTATGGTTAAAGCGGAACCAGATGTTAAAAAATTAGAAGACCACTT
CAAGGCGGTCAATTAGAAGAGGTATTCTTCAGGCTGAACATGAATAAATCTGGCAAGAAAAATGAGG
GAATGAAACTATGGGAGCCATTAGTGAAGAGCCTCCTGCCGATCAGTGAAATGGCCAATA
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

Protein Sequence: >Peptide sequence encoded by RG235698
Blue=ORF Red=Cloning site Green=Tag(s)

```
MPYRRTGLVGLAVCNTPHERLRILYTKILDVLEEIPKNAAYRKYTEQITNEKLMVKAEPDVKKLEDQL
QGGQLEEVILQAEHELNLARKMREWKLEPLVEEPPADQWKWPI
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
SVIFTDKIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

Restriction Sites: Sgfl-MluI



Cloning Scheme:


ACCN: NM_001282421

ORF Size: 339 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_001282421.2](#), [NP_001269350.1](#)

RefSeq Size: 5610 bp

RefSeq ORF: 342 bp

Locus ID: 4698

UniProt ID: [Q16718](#)

Cytogenetics: 7q31.32

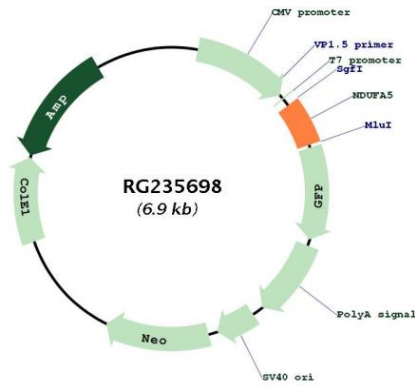
Protein Pathways: Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease

MW: 13.7 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 RG235698