

Product datasheet for **RC235698**

NDUFA5 (NM_001282421) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NDUFA5 (NM_001282421) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: NDUFA5
Synonyms: B13; CI-13kB; CI-13KD-B; NUFM; UQOR13
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RC235698 representing NM_001282421
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGCCTTACCGGACCACTGGCCTTGTGGGATTGGCTGTGTGCAACTCCTCACGAGAGGCTAAGAATAT
TGTACACAAAGATTCTTGATGTTCTTGAGGAAATCCCTAAAAATGCAGCATATAGAAAGTATACAGAACA
GATTACAATGAGAAGCTGGCTATGGTTAAAGCGGAACCAGATGTAAAAAATTAGAAGACCAACTCAA
GGCGGTCAATTAGAAGAGGTGATTCTTCAGGCTGAACATGAACTAAATCTGGCAAGAAAAATGAGGGAAT
GAAACTATGGGAGCCATTAGTGAAGAGCCTCCTGCCGATCAGTGGAAATGGCCAATA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC235698 representing NM_001282421
Red=Cloning site Green=Tags(s)

MPYRTTGLVGLAVCNTPHERLRILYTKILDVLEEIPKNAAYRKYTEQITNEKLAMVKAEPDVKKLEDQLQ
GGQLEEIVLQAEHELNLARKMREWKLWEPLVEEPPADQWKWPI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI

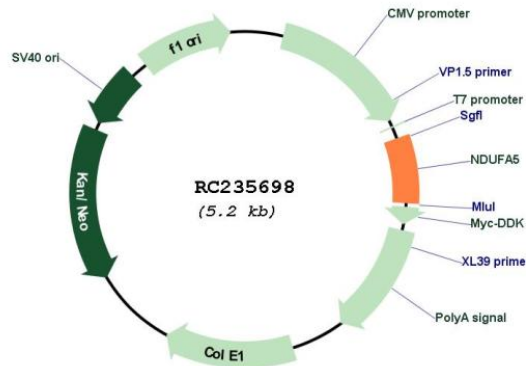


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Cloning Scheme:



Plasmid Map:



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).
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_001282421.2</u> , <u>NP_001269350.1</u>
RefSeq Size:	5610 bp
RefSeq ORF:	342 bp
Locus ID:	4698
UniProt ID:	<u>Q16718</u>
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]