

Product datasheet for **RC200567**

NDUFS3 (NM_004551) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NDUFS3 (NM_004551) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: NDUFS3
Synonyms: CI-30; MC1DN8
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC200567 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGCGGCGGGCGGGTAGCCAGGCTGTGGTGCGCGGGATCTTGGGGCCTCGGCGTGACCAGGGGGA
CTGGGCGACCCTCCGTTCTGTTGCTGCCGGTGAGGCGGGAGAGCGCCGGGCGACACGCGCCCCACTGT
CAGACCACGGAATGATGTGGCCACAAGCAGCTCTCAGCTTTGGAGAGTATGTGGCTGAAATCTTGCCC
AAGTATGTCCAACAAGTTCAGGTGCTCCTGCTTCAATGAGTTAGAGGCTGTATCCATCCTGATGGCGTCA
TCCCAGTCTGACTTTCCCTCAGGGATCACACCAATGCACAGTTCAAATCTCTGGTTGACTTGACAGCAGT
GGACGTCCCAACTCGGCAAAACCGTTTTGAGATTGTCTACAACCTGTTGTCTCTGCGCTTCAACTACGG
ATCCGTGTGAAGACCTACACAGATGAGCTGACGCCATTGAGTCTGCTGTCTCTGTGTTCAAGGCAGCCA
ACTGGTATGAAAGGGAGATCTGGGACATGTTTGGAGTCTTCTTTGCTAACCACCCTGATCTAAGAAGGAT
CCTGACAGATTATGGCTTCGAGGGACATCCTTTCCGAAAGACTTTCCTCTATCTGGCTATGTTGAGTTA
CGTTATGATGATGAAGTGAAGCGGGTGGTGGCAGAGCCGGTGGAGTTGGCCCAAGAGTTCGCAAAATTTG
ACCTGAACAGCCCCTGGGAGGCTTCCAGTCTATCGCCAACCCCGGAGAGTCTCAAGCTTGAAGCCGG
AGACAAGAAGCCTGATGCCAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC200567 protein sequence
Red=Cloning site Green=Tags(s)

MAAAVARLWWRGILGASALTRGTGRPSVLLLPVRRESAGADTRPTVPRNDVAHKQLSAFGEYVAEILP
 KYVQVQVQVSCFNELEVCIHPDGVIPVL TFLRDHTNAQFKSLVDL TAVDVPTRQNRFEIVYNLLSLRFNSR
 IRVKTYTDELTPIESAVSVFKAANWYEREIWDMGVFFANHPDLRRILTDYGFEGHPFRKDFPLSGYVEL
 RYDDEVKRVVAEPVELAQEFRKFDLNSPWAEFPVYRQPPELKLKLEAGDKKPKDAK

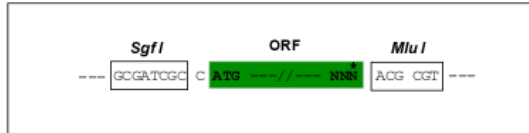
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6034_d07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_004551

ORF Size: 792 bp

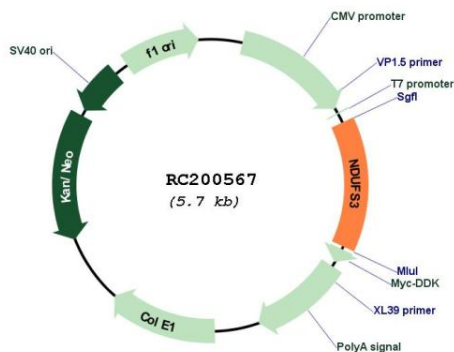
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

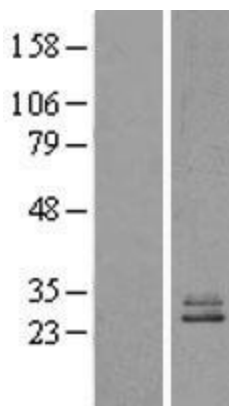
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_004551.3</u>
RefSeq Size:	971 bp
RefSeq ORF:	795 bp
Locus ID:	4722
UniProt ID:	<u>O75489</u>
Cytogenetics:	11p11.2
Domains:	complex1_30Kd
Protein Pathways:	Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
MW:	30.2 kDa
Gene Summary:	This gene encodes one of the iron-sulfur protein (IP) components of mitochondrial NADH:ubiquinone oxidoreductase (complex I). Mutations in this gene are associated with Leigh syndrome resulting from mitochondrial complex I deficiency.[provided by RefSeq, Apr 2009]

Product images:



Circular map for RC200567



Western blot validation of overexpression lysate (Cat# [LY401443]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200567 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).