

## Product datasheet for **RC207387**

### Mimitin (NDUFAF2) (NM\_174889) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Mimitin (NDUFAF2) (NM\_174889) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** NDUFAF2  
**Synonyms:** B17.2L; MC1DN10; mimitin; MMTN; NDUFA12L  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC207387 representing NM\_174889  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGTTGGTCTCAGGATTTGTTCCGCGCCTTGTTGGAGATCGCTGTCAAGGGAAGTGAAGGAGCACGTGG  
GCACGGACCAATTCGGGAACAAATACTACTACATCCCGCAGTACAAGAACTGGAGAGGACAACTATTTCG  
AGAGAAAAGAATTGTAGAAGCAGCAAATAAAAAAGAAGTAGACTATGAAGCAGGGGATATCCAACAGAA  
TGGGAAGCTTGGATTAGAAGAACAAGAAAGACTCCACCTACTATGGAGGAAATACTAAAGAATGAAAAAC  
ACAGAGAAGAAATCAAAATAAAAAGCCAAGATTTTATGAAAAAGAAAACTCCTTAGTAAAGAGACCAG  
TGAGGAACTCCTGCCTCCACCAGTTCAAATCAAATTAAGGCCATGCCTCTGCTCCATACTTTGGAAG  
GAAGAACCCTCAGTGGCTCCAGCAGCACTGGTAAAACCTTTCAGCCAGGATCCTGGATGCCACGAGATG  
GCAAGAGCCACAATCAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC207387 representing NM\_174889  
Red=Cloning site Green=Tags(s)  
MGWSQDLFRALWRSLSREVKEHVGTDQFGNKYYYIPQYKNWRGQTIREKRIVEAANKKEVDYEAGDIPTE  
WEAWIRTRKTPPTMEEILKNEKHREEIKIKSQDFYEKELLSKETSEELLPPPVTQIKGHASAPYFGK  
EEPSVAPSTGKTFQPGSWMPRDGKSHNQ

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

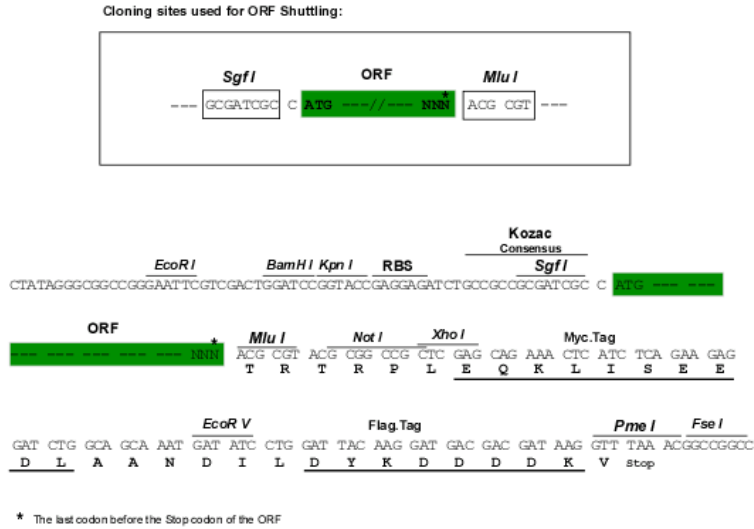
**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1427\\_e05.zip](https://cdn.origene.com/chromatograms/ja1427_e05.zip)



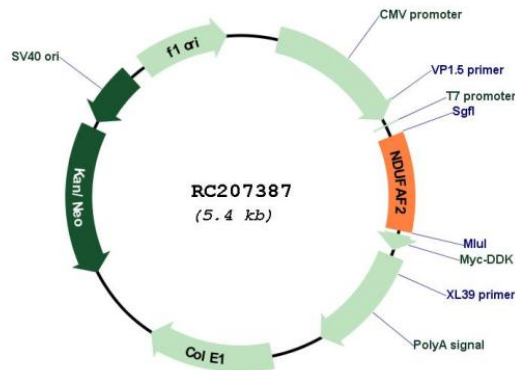
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Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_174889

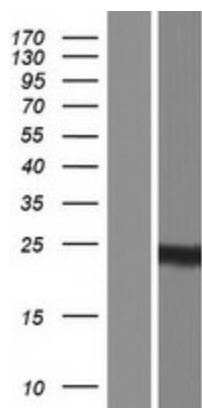
ORF Size: 507 bp

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](#)

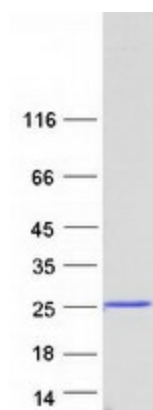
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_174889.5</a>
<b>RefSeq Size:</b>	650 bp
<b>RefSeq ORF:</b>	510 bp
<b>Locus ID:</b>	91942
<b>UniProt ID:</b>	<a href="#">Q8N183</a>
<b>Cytogenetics:</b>	5q12.1
<b>MW:</b>	19.7 kDa
<b>Gene Summary:</b>	NADH:ubiquinone oxidoreductase (complex I) catalyzes the transfer of electrons from NADH to ubiquinone (coenzyme Q) in the first step of the mitochondrial respiratory chain, resulting in the translocation of protons across the inner mitochondrial membrane. This gene encodes a complex I assembly factor. Mutations in this gene cause progressive encephalopathy resulting from mitochondrial complex I deficiency. [provided by RefSeq, Jul 2008]

### Product images:



Western blot validation of overexpression lysate (Cat# [LY406293]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC207387 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified NDUFAF2 protein (Cat# [TP307387]). The protein was produced from HEK293T cells transfected with NDUFAF2 cDNA clone (Cat# RC207387) using MegaTran 2.0 (Cat# [TT210002]).