

## **Product datasheet for RC210482**

## NDUFA4 (NM 002489) Human Tagged ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: NDUFA4 (NM\_002489) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: NDUFA4

Synonyms: CI-9k; CI-MLRQ; COXFA4; MC4DN21; MISTR1; MLRQ; MRCAF1

Mammalian Cell

Selection:

Neomycin

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)ORF Nucleotide>RC210482 ORF sequence

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

TACAGCAAGCTGAAGAAGGAACGTCCAGATTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGGATCTGGCAGCAAATGATATCCTGGATT

ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC210482 protein sequence

Red=Cloning site Green=Tags(s)

MLRQIIGQAKKHPSLIPLFVFIGTGATGATLYLLRLALFNPDVCWDRNNPEPWNKLGPNDQYKFYSVNVD

YSKLKKERPDF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: <a href="https://cdn.origene.com/chromatograms/mk6071">https://cdn.origene.com/chromatograms/mk6071</a> a02.zip

Restriction Sites: Sgfl-Mlul



**OriGene Technologies, Inc.** 9620 Medical Center Drive, Ste 200

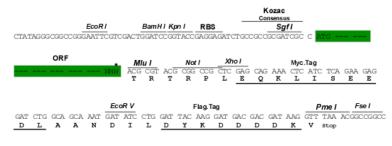
CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



## **Cloning Scheme:**





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_002489

ORF Size: 243 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:** 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 002489.4</u>

RefSeq Size: 2058 bp



 RefSeq ORF:
 246 bp

 Locus ID:
 4697

 UniProt ID:
 000483

 Cytogenetics:
 7p21.3

**Protein Families:** Transmembrane

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

Parkinson's disease

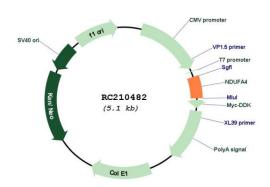
**MW:** 9.4 kDa

**Gene Summary:** The protein encoded by this gene belongs to the complex I 9kDa subunit family. Mammalian

complex I of mitochondrial respiratory chain is composed of 45 different subunits. This protein has NADH dehydrogenase activity and oxidoreductase activity. It transfers electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is

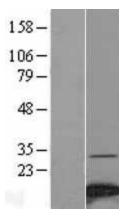
believed to be ubiquinone. [provided by RefSeq, Jul 2008]

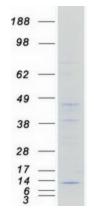
## **Product images:**



Circular map for RC210482







Western blot validation of overexpression lysate (Cat# [LY400888]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210482 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified NDUFA4 protein (Cat# [TP310482]). The protein was produced from HEK293T cells transfected with NDUFA4 cDNA clone (Cat# RC210482) using MegaTran 2.0 (Cat# [TT210002]).