

Product datasheet for **RC216095**

NDUFB2 (NM_004546) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NDUFB2 (NM_004546) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: NDUFB2
Synonyms: AGGG; CI-AGGG
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC216095 representing NM_004546
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTCCGCTCTGACTCGGCTGGCGTCTTCGCTCGCGTTGGAGGCCGCTTTTCAGAAGCGGCTGCGCAC
GGACTGCTGGAGATGGTGGAGTCCGTCATGCCGGTGGTGGTGTGCACATTGAGCCCCGGTATAGACAGTT
CCCCAGCTGACCAGATCCAGGTGTTCCAGAGCGAGTTCTTCAGCGGACTCATGTGGTTCTGGATTCTC
TGGCGCTTTTGGCATGACTCAGAAGAGGTGCTGGGTCACTTCCGTATCCTGATCCTTCCAGTGGACAG
ATGAAGAATTAGGTATCCCTCCTGATGATGAAGAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC216095 representing NM_004546
Red=Cloning site Green=Tags(s)
MSALTRLAS FARVGGRLFRSGCARTAGDGGVVRHAGGGVHIEPRYRQFPQLTRSQVFQSEFFSGLMWFIL
WRFWHDSEEVLGHPYPDPSPQWTDEELGIPPDDED

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6485_b08.zip

Restriction Sites: SgfI-MluI



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Cloning Scheme:


ACCN: NM_004546

ORF Size: 315 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.

RefSeq: [NM_004546.3](#)

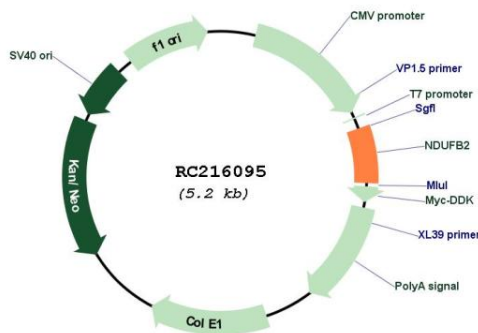
RefSeq Size: 509 bp

RefSeq ORF: 318 bp

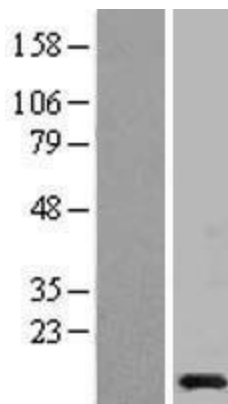
Locus ID: 4708

UniProt ID: [O95178](#)
Cytogenetics: 7q34
Protein Pathways: Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
MW: 12.06 kDa
Gene Summary: The protein encoded by this gene is a subunit of the multisubunit NADH:ubiquinone oxidoreductase (complex I). Mammalian complex I is composed of 45 different subunits. This protein has NADH dehydrogenase activity and oxidoreductase activity. It plays a important role in transferring electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone. Hydrophathy analysis revealed that this subunit and 4 other subunits have an overall hydrophilic pattern, even though they are found within the hydrophobic protein (HP) fraction of complex I. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC216095



Western blot validation of overexpression lysate (Cat# [LY417915]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC216095 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).