

Product datasheet for **RC224571**

NDUFB1 (NM_004545) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: NDUFB1 (NM_004545) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: NDUFB1
Synonyms: CI-MNLL; CI-SGDH; MNLL
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC224571 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATTTGCTGGCGTCACCCCTCTGCTCCGTGCGGGCGCGGAATGGCAGGTCCCAGGTGCGAGCTTC
CACTGGCGCGGGTTGAGTTCCTGTTGCCCTTGGTCTCGGGTTCGCTGTAGGCGCTGAGGCTGCAGCTAT
CATGGTGAACCTACTTCAGATTGTGCGGGACCACTGGGTTTCATGTTCTTGTCCCTATGGGATTTGCATT
GGATGTTATTTAGACAGAAAGAGTGATGAACGGCTAACTGCCTCCGGAACAAGAGTATGTTATTTAAA
GGGAATTGCAACCCAGTGAAGAAGTTACCTGGAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC224571 protein sequence
Red=Cloning site Green=Tags(s)
MICWRHPSAPCGRGEWQVPRSQLPLARVEFPVALGLGVAVGAEAAAIMVNLLQIVRDHWHVLPVPMGFVI
GCYLDRKSDERLTAFRNKSMLFKRELQPSEEVTK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6466_f03.zip

Restriction Sites: SgfI-MluI



[View online »](#)

Cloning Scheme:


ACCN: NM_004545

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_004545.3](#), [NP_004536.2](#)

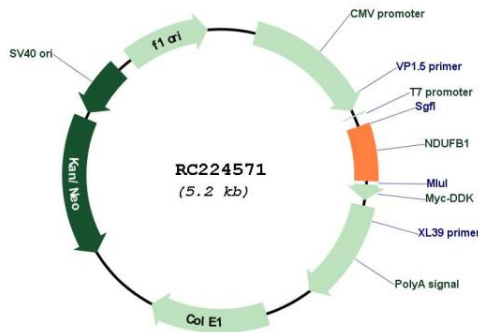
RefSeq Size: 433 bp

RefSeq ORF: 177 bp

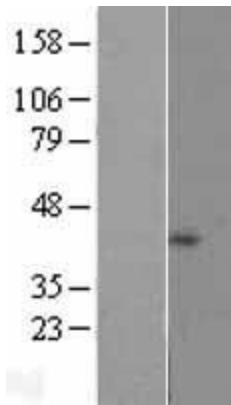
Locus ID: 4707

UniProt ID: [O75438](#)
Cytogenetics: 14q32.12
Protein Families: Transmembrane
Protein Pathways: Alzheimer's disease, Huntington's disease, Metabolic pathways, Oxidative phosphorylation, Parkinson's disease
MW: 11.9 kDa
Gene Summary: Accessory subunit of the mitochondrial membrane respiratory chain NADH dehydrogenase (Complex I) that is believed not to be involved in catalysis. Complex I functions in the transfer of electrons from NADH to the respiratory chain. The immediate electron acceptor for the enzyme is believed to be ubiquinone.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC224571



Western blot validation of overexpression lysate (Cat# [LY417914]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224571 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).