

Product datasheet for RC200616L3

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OriGene Technologies, Inc.

NDUFA1 (NM_004541) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: NDUFA1 (NM 004541) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: NDUFA1

Synonyms: CI-MWFE; MC1DN12; MWFE; ZNF183

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC200616).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_004541

ORF Size: 210 bp





NDUFA1 (NM_004541) Human Tagged Lenti ORF Clone - RC200616L3

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: <u>NM 004541.2</u>

 RefSeq Size:
 502 bp

 RefSeq ORF:
 213 bp

 Locus ID:
 4694

 UniProt ID:
 015239

Cytogenetics: Xq24

Protein Families: Transmembrane

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

Parkinson's disease

MW: 8.1 kDa

Gene Summary: The human NDUFA1 gene codes for an essential component of complex I of the respiratory

chain, which transfers electrons from NADH to ubiquinone. It has been noted that the N-terminal hydrophobic domain has the potential to be folded into an alpha-helix spanning the

inner mitochondrial membrane with a C-terminal hydrophilic domain interacting with

globular subunits of complex I. The highly conserved two-domain structure suggests that this

feature is critical for the protein function and might act as an anchor for the

NADH:ubiquinone oxidoreductase complex at the inner mitochondrial membrane. However,

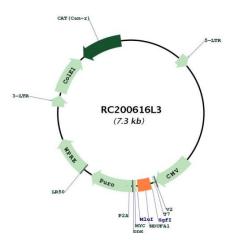
the NDUFA1 peptide is one of about 31 components of the "hydrophobic protein" (HP)

fraction of complex I which is involved in proton translocation. Thus the NDUFA1 peptide may

also participate in that function. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC200616L3