

Product datasheet for RC200616L4V

OriGene Technologies, Inc.

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NDUFA1 (NM_004541) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: NDUFA1 (NM_004541) Human Tagged ORF Clone Lentiviral Particle

Symbol: NDUFA1

Synonyms: CI-MWFE; MC1DN12; MWFE; ZNF183

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

ACCN: NM_004541

ORF Size: 210 bp

ORF Nucleotide

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

OTI Disclaimer:

Sequence:

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.

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





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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]