

Product datasheet for RC200639L2

OriGene Technologies, Inc.

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Lipoamide Dehydrogenase (DLD) (NM_000108) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Lipoamide Dehydrogenase (DLD) (NM_000108) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Lipoamide Dehydrogenase

Synonyms: DLDD; DLDH; E3; GCSL; LAD; OGDC-E3; PHE3

Mammalian Cell None

Selection:

Vector: pLenti-C-mGFP (PS100071)

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

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC200639).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_000108

ORF Size: 1527 bp



Lipoamide Dehydrogenase (DLD) (NM_000108) Human Tagged Lenti ORF Clone - RC200639L2

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 000108.3</u>

RefSeq Size: 3613 bp
RefSeq ORF: 1530 bp
Locus ID: 1738
UniProt ID: P09622

Cytogenetics: 7q31.1

Domains: pyr_redox, pyr_redox_dim

Protein Families: Druggable Genome

Protein Pathways: Citrate cycle (TCA cycle), Glycine, serine and threonine metabolism, Glycolysis /

Gluconeogenesis, Metabolic pathways, Pyruvate metabolism, Valine, leucine and isoleucine

degradation

MW: 54.2 kDa

Gene Summary: This gene encodes a member of the class-I pyridine nucleotide-disulfide oxidoreductase

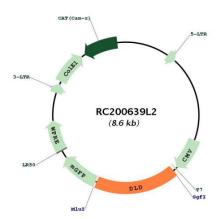
family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. In homodimeric form, the encoded protein functions as a dehydrogenase and is found in several multi-enzyme complexes that regulate energy metabolism. However, as a monomer, this protein can function as a protease.

Mutations in this gene have been identified in patients with E3-deficient maple syrup urine disease and lipoamide dehydrogenase deficiency. Alternative splicing results in multiple

transcript variants. [provided by RefSeq, Jan 2014]



Product images:



Circular map for RC200639L2