

Product datasheet for **RC238043**

Lipoamide Dehydrogenase (DLD) (NM_001289750) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lipoamide Dehydrogenase (DLD) (NM_001289750) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	DLD
Synonyms:	DLDD; DLDH; E3; GCSL; LAD; OGDC-E3; PHE3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC238043 representing NM_001289750 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**GCGATCGCC**

ATGCCCATGGAAAAGATTTTGCATCTAGAGGAATTGAAATGTCCGAAGTTCGTTGAATTTAGACAAGA
TGATGGAGCAGAAGAGTACTGCAGTAAAAGCTTTAACAGGTGGAATTGCCCACTTATTCAAACAGAATAA
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
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Protein Sequence: >RC238043 representing NM_001289750
 Red=Cloning site Green=Tags(s)

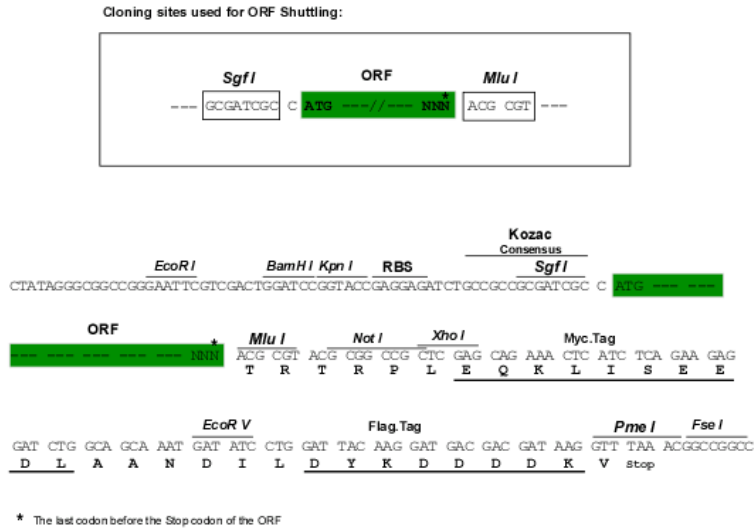
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 TAVEFLGHVGGVGDMEISKNFQRILQKQGFKFLNKTGATKKSDGKIDVSIEAASGGKAEVITCDVL
 LVCIGRRPFTKNLGLEELGIELDPRGRIPVNTRFQTKIPNIYAIGDVVAGPMLAHKAEDGEIICVEGMAG
 GAVHIDYNCVPSVIYTHPEVAWVGKSEEQLKEEGIEYKVGKFPFAANSRAKTNADTDGMVKILGQKSTDR
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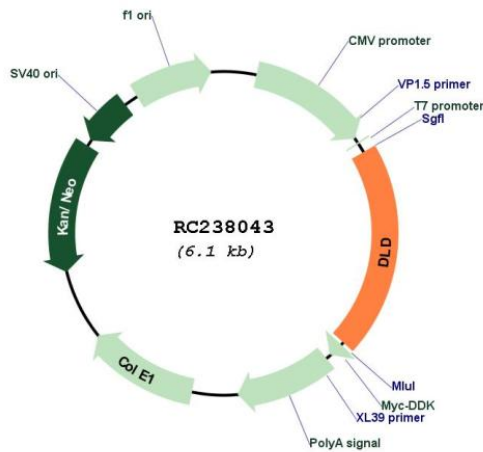
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001289750

ORF Size:	1230 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:	<ol style="list-style-type: none"> 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_001289750.1 , NP_001276679.1
RefSeq Size:	3464 bp
RefSeq ORF:	1233 bp
Locus ID:	1738
UniProt ID:	P09622
Cytogenetics:	7q31.1
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:	44 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]