

Product datasheet for **RC238508**

Lipoamide Dehydrogenase (DLD) (NM_001289751) Human Tagged ORF Clone

Product data:

| | |
|--------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Lipoamide Dehydrogenase (DLD) (NM_001289751) 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 |



[View online »](#)

ORF Nucleotide Sequence:

>RC238508 representing NM_001289751
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCAGAGCTGGAGTCGTGTACTGCTCCTTGCCAAAGAGAGGCCATTTCAATCGAATATCTCATGGCC
 TACAGGGACTTTCTGCAGTGCCTCTGAGAACTTACGCAGATCAGCCGATTGATGCTGATGTAAACAGTTAT
 AGGTTCTGGTCTCGAGGATATGTTGCTCTATTAAGCTGCCAGTTAGGCTTCAAGGCTTTATTGAAC
 AACTCTCATTATTACCATATGGCCCATGGAAAAGATTTTGCATCTAGAGGAATTGAAATGCCGAAGTTC
 GCTTGAATTTAGACAAGATGATGGAGCAGAAGAGTACTGCAGTAAAAGCTTTAACAGGTGGAATTGCCCA
 CTTATTCAAACAGAATAAGGTTGTTCAATGTCAATGGATATGGAAAGATAACTGGCAAAAAACAAGTCACT
 GCTACGAAAGCTGATGGCGGCACTCAGGTTATTGATACAAAGAACATTCTATAGCCACGGGTTGAGAAG
 TACTCCTTTTCTGGAATCACGATAGATGAAGATACAATAGTGCATCTACAGGTGCTTTATCTTTAAA
 AAAAGTCCAGAAAAGATGGTTGTTATTGGTGCAGGAGTAAAGTGTAGATTGGGTTGAGTTTGGCAA
 AGACTTGGTGCAGATGTACAGCAGTTGAATTTTGGTGTAGTGGAGTTGGAATTGATATGGAGA
 TATCTAAAAACTTTCAACGCATCCTTCAAAAAACAGGGTTTAAATTTAAATTGAATACAAAGTTACTGG
 TGCTACCAAGAAGTCAGATGGAAAAATTGATGTTTCTATTGAAGCTGCTTCTGGTGGTAAAGCTGAAGTT
 ATCACTTGTGATGACTCTTGGTTTGCATTGGCCGACGACCCCTTACTAAGAATTTGGGACTAGAAGAGC
 TGGGAATTGAACTAGATCCAGAGGTAGAATCCAGTCAATACCAGATTTCAAATAAAATTTCAAATAT
 CTATGCCATTGGTGTAGTGGTGGTCCAATGCTGGCTCACAAGCAGAGGATGAAGGCATTATCTGT
 GTTGAAGGAATGGCTGGTGGTGTGTGCACATTGACTACAATTGTGTGCCATCAGTGATTTACACACACC
 CTGAAGTTGCTTGGTTGGCAAATCAGAAGAGCAGTTGAAAGAAGAGGGTATTGAGTACAAGTTGGGAA
 ATTCCCATTTGCTGCTAACAGCAGAGCTAAGACAATGCTGACACAGATGGCATGGTGAAGATCCTTGGG
 CAGAAATCGACAGACAGAGTACTGGGAGCACATATTCTTGGACCAGGTGCTGGAGAAATGGTAAATGAAG
 CTGCTCTTGTCTTGAATATGGAGCATCCTGTGAAGATATAGCTAGAGTCTGTCATGCACATCCGACCTT
 ATCAGAAGCTTTAGAGAAGCAAATCTTGTGCGTCATTTGGCAAATCAATCACTTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238508 representing NM_001289751
 Red=Cloning site Green=Tags(s)

MQSWSRVYCSLAKRGHFNRISHGLQGLSAVPLRXYADQPIDADTVIGSGPGGYVAAIKAAQLGFKALLN
 NSHYHMAHGKDFASRGIEMSEVRLNLDKMMQKSTAVKALTGGIAHLFKQNKVVHVNGYKITGKNQVT
 ATKADGGTQVIDTKNILIATGSEVTPFPGITIDEDTIVSSTGALSLKKVPEKMMVIGAGVIGVELGSVWQ
 RLGADVTAVEFLGHVGGVGDMEISKNFQRILQKQGFKLNKVTGATKSDGKIDVSI EAASGGKAEV
 ITCVLLVCIGRRPFTKNLGLEELGIELDPRGRIPVNTFRFQTKIPNIYAI GDVVAGPMLAHKADEGIIC
 VEGMAGGAVHIDYNCVPSVIYTHPEVAWVGKSEEQLKEEGIEYKVGKFPFAANSRAKTNADTDGMVKILG
 QKSTDRVLGAHILGPGAGEMVNEAALALEYGASCEDIARVCHAHP TLEAFREANLAASF GKSINF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

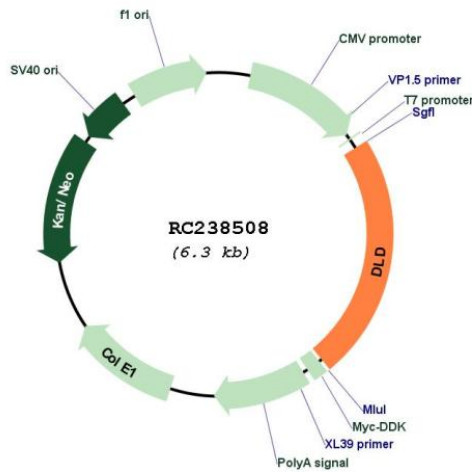
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001289751

ORF Size: 1458 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_001289751.1 , NP_001276680.1 |
| RefSeq Size: | 3544 bp |
| RefSeq ORF: | 1461 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: | 52.3 kDa |
| Gene Summary: | <p>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]</p> |