

## Product datasheet for **RG222613**

### LDHD (NM\_194436) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	LDHD (NM_194436) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LDHD
Synonyms:	DLACD; DLD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG222613 representing NM\_194436  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCCGACTGCTCAGGTCTGCAACCTGGGAGCTGTTCCCTGGAGGGGCTACTGCTCCCAGAAGGCAA  
 AGGGAGAGCTCTGCAGGGACTTCGTAGAGGCTCTGAAGGCCGTGGTGGGCGGCTCCACAGTGTCCACTGC  
 CGCGGTGGTCCGAGAGCAGCACGGGCGCGATGAGTCGGTGCACAGGTGCGAACCTCCTGATGCTGTGGT  
 TGGCCCCAGAACGTGGAGCAGGTGAGCCGGCTGGCAGCCCTGTGCTATCGCCAAGGTGTGCCATCATCC  
 CATTTCGGCACCAGCACCGGGCTTGGGGTGGCGTCTGTGCTGTGCAGGGCGGCTCTGCGTTAACCTGAC  
 GCATATGGACCGAATCCTGGAGCTGAACCAGGAGGACTTCTGTGGTGGTGGAGCCAGGTGTACCCGC  
 AAAGCCCTCAACGCCACCTGCGGGACAGCGGCTCTGGTTTCCCGTGGACCCAGGCGGGACGCCTCTC  
 TCTGTGGCATGGCGGCCACCGGGCGTGGGGACCAACCGGTCCGCTACGGCACCATGCGGGACAACGT  
 GCTCAACCTGGAGGTGGTGTGCTGCCGACGGGCGGCTGCTGCACACGGCGGGCCGAGCGCGCATTTCGG  
 AAGAGTGCAGCCGGCTACAACCTCACGGGGCTTTCGTGGGCTCCGAGGGGACGCTGGGCTCATACAG  
 CCACCACCTGCGCCTGCACCCTGCCCTGAGGCCACAGTGGCCGCCACGTGTGCGTTCCCCAGTGTCCA  
 GGCTGCTGTGGACAGCACTGTACACATCCTCCAGGCTGCAGTGCCTGAGCCGCATTGAGTTTCTGGAT  
 GAAGTCATGATGGATGCCTGCAACAGGTACAGCAAGCTGAATTGCTTAGTGGCGCCACACTTTCCTGG  
 AGTTCCATGGCTCCCAGCAGGCACTGGAGGAGCAGCTGCAGCGCACAGAGGAGATAGTCCAGCAGAACGG  
 AGCCTCTGACTTCTCTGGGCCAAGGAGGCCGAGGAGCGCAGCCGGCTTGGACAGCAGGCACAATGCC  
 TGGTACGACGCCCTGGCCACGCGGCCAGGCTGCAAGGGCTACTCCACGGATGTGTGTGTGCCATTCGCC  
 GGCTGCCGGAGATCGTGGTGCAGACCAAGGAGGATCTGAATGCCCTCAGGACTCACAGGAAGCATTGTCCG  
 GCATGTGGGTGACGGCAACTTCCACTGCATCCTGCTGGTCAACCTGATGACGCCGAGGAAGTGGGCGAGG  
 GTCAAGGCTTTTGCAGAACAGCTGGGCAGGCGGCACTGGCTCTCCACGGAACGTGCACGGGGAGCATG  
 GCATCGGAATGGCAAGCGGCAGCTGCTGCAGGAGGAGTGGGCGCGTGGGCGTGGAGACCATGCGGCA  
 GCTCAAGGCCGTGCTAGACCCCCAAGGCCTCATGAATCCAGGCAAAGTGCTG

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

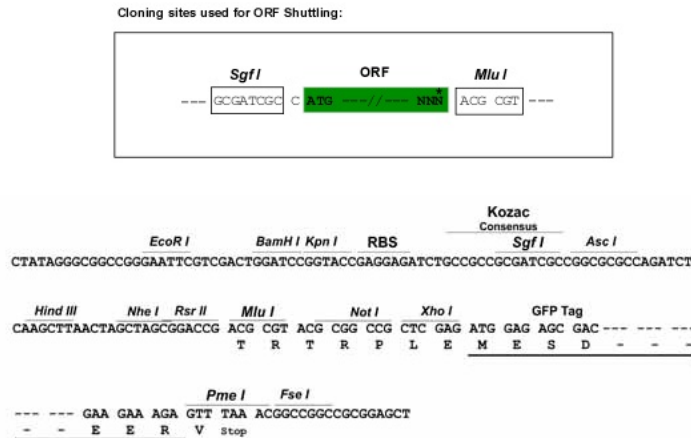
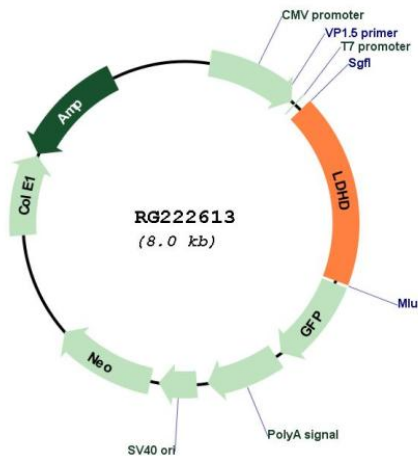
>RG222613 representing NM\_194436  
 Red=Cloning site Green=Tags(s)

MARLLRSATWELFPWRGYCSQKAKGELCRDFVEALKAVVGGSHVSTAAVVREQHGRDESVHRCEPPDAVV  
 WPQNVEQVSRLAALCYRQGVPIIPFGTGTLEGGVCAVQGGVCVNLTHMDRILELNQEDFSVVVEPGVTR  
 KALNAHLRDSGLWFPVDPGADASLGMMAATGASGTNAVRYGTMRDVNLNLEVVLPDGRLLHTAGRGRHFR  
 KSAAGYNLTGLFVGSEGLGLITATTLRLHPAPEATVAATCAFPSVQAAVDSTVHILQAAVPPVARIIEFLD  
 EVMMDACNRYSKLNCLVAPTLFLEFHGSQQALEEQLQRTEEIVQQNGASDFSWAKEAEERSRLWTRHNA  
 WYAALATRPCKGYSTDVCVPIISRLPEIVVQTKEDLNASGLTGSIVGHVGDGNFHCILLVNPDDAEELGR  
 VKFAEQLGRRALALHGTCTGEHIGMGRQLLQEEVAVGVETMRQLKAVLDPQGLMNPQKVL

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_194436

**ORF Size:** 1452 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:**

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\\_194436.3](#)

**RefSeq Size:** 2022 bp

**RefSeq ORF:** 1455 bp

**Locus ID:** 197257

**UniProt ID:** [Q86WU2](#)

**Cytogenetics:** 16q23.1

**Protein Pathways:** Pyruvate metabolism

**Gene Summary:** The protein encoded by this gene belongs to the D-isomer specific 2-hydroxyacid dehydrogenase family. The similar protein in yeast has both D-lactate and D-glycerate dehydrogenase activities. Alternative splicing occurs at this locus and two transcript variants encoding distinct isoforms have been identified. [provided by RefSeq, Jul 2008]