

Product datasheet for SC116656

LDHA (NM_005566) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	LDHA (NM_005566) Human Untagged Clone
Tag:	Tag Free
Symbol:	LDHA
Synonyms:	GSD11; HEL-S-133P; LDHM; PIG19
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC116656 sequence for NM_005566 edited (data generated by NextGen Sequencing)

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ATGGCAACTCTAAAGGATCAGCTGATTTATAATCTTCTAAAGGAAGAACAGACCCCCAG
AATAAGATTACAGTTGTTGGGGTTGGTGCCTGTTGGCATGCCTGTGCCATCAGTATCTTA
ATGAAGGACTTGGCAGATGAACTTGCTCTTGTGATGTCATCGAAGACAAATTGAAGGGA
GAGATGATGGATCTCCAACATGGCAGCCTTTTCCTTAGAACACCAAAGATTGTCTCTGGC
AAAGACTATAATGTAAGTCAAAGCTGAACTCCAAGCTGGTCATTATCACGGCTGGGGCACGTCAG
CAAGAGGGAGAAAAGCCGTCTTAATTTGGTCCAGCGTAACGTGAACATCTTAAATTCATC
ATTCCTAATGTTGTAATAACAGCCGAACTGCAAGTTGCTTATTGTTTCAAATCCAGTG
GATATCTTGACCTACGTGGCTTGAAGATAAGTGGTTTTCCAAAAACCGTGTATTGGA
AGTGGTTGCAATCTGGATTACGCCGATTCCGTTACCTGATGGGGAAAGGCTGGGAGTT
CACCCATTAAGCTGTCATGGGTGGGTCCTTGGGGAACATGGAGATTCCAGTGTGCCTGTA
TGGAGTGAATGAATGTTGCTGGTGTCTCTCTGAAGACTCTGCACCCAGATTTAGGGACT
GATAAAGATAAGGAACAGTGGAAAGAGGTTCAACAGCAGGTGGTTGAGAGTGCTTATGAG
GTGATCAAACCTCAAAGGCTACACATCCTGGGCTATTGGACTCTCTGTAGCAGATTTGGCA
GAGAGTATAATGAAGAATCTTAGGCGGGTGCACCCAGTTTCCACCATGATTAAGGGTCTT
TACGGAATAAAGGATGATGTCTTCTTAGTGTTCCTTGCATTTTGGGACAGAATGGAATC
TCAGACCTTGTGAAGGTGACTCTGACTTCTGAGGAAGAGGCCCGTTTGAAGAAGAGTGCA
GATACACTTTGGGGATCCAAAAGGAGCTGCAATTTTAA

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Clone variation with respect to NM_005566.3
483 c=>t;519 a=>g



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5' Read Nucleotide Sequence:

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>OriGene 5' read for NM_005566 unedited
TACGACTCACTATAGGGCGGCCGGAATTCGCACGAGGCTGCCGCCGATTCCGGATCTCA
TTGCCACGCGCCCCGACGACCGCCGACGTGCATTCCCGATTCTTTTGGTTCCAAGTC
CAATATGGCAACTCTAAAGGATCAGCTGATTTATAATCTTCTAAAGGAAGAAGACAGACCC
CCAGAATAAGATTACAGTTGTTGGGGTGGTGTGTTGGCATGGCCTGTGCCATCAGTAT
CTTAATGAAGGACTTGGCAGATGAACCTTGTCTTGTGATGTCATCGAAGACAAATTGAA
GGGAGAGATGATGGATCTCCAACATGGCAGCCTTTTCTTAGAACACCAAGATTGTCTC
TGGCAAAGACTATAATGTAAGTCAAACTCCAAGCTGGTATTATCACGGCTGGGGCAGC
TCAGCAAGAGGGAGAAAGCCGTCTTAATTTGGTCCAGCGTAACGTGAACATCTTTAAATT
CATCATTCCCTAATGTTGTAAAATACAGCCCGAACTGCAAGTTGCTTATTGTTTCAAATCC
AGTGGATATCTTGACCTACGTGGCTTGGAAAGATAAGTGGTTTTCCAAAAACCGTGTAT
TGGAAAGTGGTTGCAATCTGGATTACGCCCGATTCCGTTACCTGATGGGGAAAGGGCTG
GGAGTTACCCATTAAGCTGTATGGGGTGGTCTTGGGGAACATGGAGATTCCAGTGT
GCCTGTATGGAGTGAATGATGNTGCCTGGTGTCTCTCTGAGACTCTGCCCCAGATTANG
GACTGATAAGATAAGGACAGTGNAAAAGAGTACAAGCAGGTGGTTGAAAGTCTTATGGA
GTGATCAACTCAAAGCTACCATNCTGGGCTATGGACTCTTGTAGCGATTTCAGAAATTT
ATGGAGATCTTAGCGGTGCCCCAGTTCACATGAATAAAGGTCTTACGAAAGAGGAGAAG
CTCCCCTAGTCTGCATTGGGACAATGAAT
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3' Read Nucleotide Sequence:

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>OriGene 3' read for NM_005566 unedited
GCTATGGACCGCGGCACGCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTT
TTTTTTTTTAACTGTTAAAGGTTTATGGGGGTTTTAGTTGGTATAACACTTGGATAGT
GGGTTGCATTGTTGTATGTAATCTTTTTACATTATATGGAAAGTCCACTACTGATAT
AGTTCACAAAATAAAATCCTTTGGAAAAATTATGCACAAAACATGATATTGGATTATA
CACTGGATCCCAGGATGGGACTCACTGGGAAAAAATGTTGGACTAGGCATGTTCAAGGA
AGGACCCAGGAAGTTATATAACACACGGTAAACATCCACCTGGCTCAAGGGGCAAATGCA
GTACGTACAGCATTGGCAGGGGGCGTCAAAGGGGGCAAACATTTTCACTACCCAGT
TGAAGACTACCCAAGATTAATCCCTTCCAGCATCAGGATATAGCTGGGGATTTTACAAAC
CATTCTTATTTCTAACTTCAAGGATGATGTTTTTCCAGCCATCTTAAAAATTTACTG
CTTTATTCACAGATCAGATAAAAAGGACAACCTGCCCCAACCTCCACCTAAAAATCCTGTTG
TACCTAAACAGGGAAATGATATGACATCAAAGACTTTAAAAATTCAGCTCCTTTTGGG
TCCCCCAAAGTGTATCTGCACTCTTCTTAAAACGGGCCTTCTCCTCAAAGTCAGAGTCA
CCTTCACAAGGTCTGAGATTCCATTCTGTCCAAATGCAAGGACACTAAGGAAAAACATCT
CCTTTATCCGTAACCCTTATCATGGTGGAAACTGGGTGCACCCGCCTAAGATTCTTA
TTATACTCTGCCAAATCTCTACAGAGAGTCCATAGCCAGAAATGTGTAGCCTTGGAGT
TGACACCTATAGCACTTAACCACTGCTGGGACCTTTTCATTGTTCTTACTTATAGCC
TAAATTGGNNGCAATCTN
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Restriction Sites:

NotI-NotI

ACCN:

NM_005566

Insert Size:

1690 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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_005566.1](#), [NP_005557.1](#)

RefSeq Size: 1661 bp

RefSeq ORF: 999 bp

Locus ID: 3939

UniProt ID: [P00338](#)

Cytogenetics: 11p15.1

Domains: ldh

Protein Families: Druggable Genome

Protein Pathways: Cysteine and methionine metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways, Propanoate metabolism, Pyruvate metabolism

Gene Summary:

The protein encoded by this gene catalyzes the conversion of L-lactate and NAD to pyruvate and NADH in the final step of anaerobic glycolysis. The protein is found predominantly in muscle tissue and belongs to the lactate dehydrogenase family. Mutations in this gene have been linked to exertional myoglobinuria. Multiple transcript variants encoding different isoforms have been found for this gene. The human genome contains several non-transcribed pseudogenes of this gene. [provided by RefSeq, Sep 2008]

Transcript Variant: This variant (1) encodes the predominant isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.