

Product datasheet for RN202177

Ldhb (NM_012595) Rat Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ldhb (NM_012595) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Ldhb
Synonyms:	Ldh2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>RN202177 representing NM_012595 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAACCCCTTAAGGAAAAGCTCATTGCGCCAGTCGACAGCAGCAGACTGCCGTCCCGAACAAACAAGA
TTACTGTAGTAGGCGTTGGACAAGTTGGAATGGCTTGCTATCAGCATTCTGGGAAAGTCTCTGGCTGA
TGAGCTTGCCCTGGTGGATGTCTTGAAGACAAGCTCAAAGGAGAAATGATGGATCTGCAGCACGGGAGC
TTATTTCTCCAGACTCCGAAAATCGTGGCTGATAAAGATTACTCCGTGACAGCCAATTCTAAGATTGTGG
TGGTGACCGCGGAGTCCGCCAGCAGGAGGGGAGAGTCCGGCTCAACCTGGTGCAGAGAAACGTC AATGT
ATTCAAGTTCATTATTCCTCAGATCGTCAAGTACAGCCCCGACTGCACCATCATCGTGGTTTCCAACCCA
GTGGATATTCTTACCTATGTCACCTGGAAGCTGAGCGGGCTACCTAAGCACCGCGTGATTGGAAGTGGAT
GCAATCTGGATTCTGCTCGGTTTCGTTACCTCATGGCCGAAAAGCTTGGTATTATCCCAGCAGCTGCCA
CGGCTGGATCCTGGGCGAGCACGGGGACTCCAGTGTGGCAGTGTGGAGCGGGGTGAATGTGGCAGGAGTC
TCCCTCCAGGAACTGAACCCAGAGATGGGAACGGACAATGACAGCGAGAAGTGAAGGAGGTGCATAAGA
TGGTGGTGGACAGTGCCTATGAAGTCATCAAGCTAAAAGGCTACACCAACTGGGCCATCGGCCTAAGTGT
GGCTGACCTCATCGAATCCATGCTGAAAAACCTCTCTCGGATTCACCCCGTGTCTACAATGGTGAAGGGA
ATGTACGGCATCGAGAACGAAGTCTTCTCAGTCTCCCGTGCATCCTTAATGCTCGGGACTGACCAGCG
TCATCAACCAGAAGCTGAAGGACGATGAGGTGCTCAGCTCAGGAAGAGTGGGACACCCCTGTGGGATAT
CCAGAAAGACCTCAAGGACCTGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI



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ACCN:	NM_012595
Insert Size:	1005 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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_012595.2 , NP_036727.1
RefSeq Size:	1345 bp
RefSeq ORF:	1005 bp
Locus ID:	24534
UniProt ID:	P42123
Cytogenetics:	4q44
Gene Summary:	<p>This gene encodes the B subunit of lactate dehydrogenase enzyme, which catalyzes the interconversion of pyruvate and lactate with concomitant interconversion of NADH and NAD⁺ in a post-glycolysis process. Alternatively spliced transcript variants have also been found for this gene. Recent studies have shown that a C-terminally extended isoform is produced by use of an alternative in-frame translation termination codon via a stop codon readthrough mechanism, and that this isoform is localized in the peroxisomes. Pseudogenes have been identified on chromosomes X and 9. [provided by RefSeq, Feb 2016]</p> <p>Transcript Variant: This variant (1) encodes two isoforms, which result from the use of alternative in-frame translation termination codons. The shorter isoform (Ldhb) results from translation termination at the upstream UGA stop codon, while the longer isoform (Ldhbx) results from UGA stop codon readthrough to the downstream UAG termination codon. This RefSeq represents the shorter isoform (Ldhb), which is localized in the cytosol. Variants 1 and 2 encode the same isoform.</p>