

## Product datasheet for RC210627

### Lactate Dehydrogenase C (LDHC) (NM\_017448) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Lactate Dehydrogenase C (LDHC) (NM_017448) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Lactate Dehydrogenase C
Synonyms:	CT32; LDH3; LDHX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210627 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTCAACTGTCAAGGAGCAGCTAATTGAGAAGCTAATTGAGGATGATGAAAACCTCCAGTGTAATAATTA  
CTATTGTTGGAAGTGGTCCGCTAGGCATGGCTTGTGCTATTAGTATCTTACTGAAGGATTTGGCTGATGA  
ACTTGCCCTTGTGATGTTGCATTGGACAACTGAAGGGAGAAATGATGGATCTTCAGCATGGCAGTCTT  
TTCTTTAGTACTTCAAAGATTACTTCTGAAAAGATTACAGTGTATCTGAAAACCTCCAGAATAGTTATTG  
TCACAGCAGGTGCAAGGCAGCAGGAGGGAGAACTCGCCTTGCCCTGGTCCAACGTAATGTGGCTATAAT  
GAAATCAATCATTCTGCCATAGTCCATTATAGTCCTGATTGTAAAATCTTGTGTTTCAAATCCAGTG  
GATATTTTGCATATATAGTCTGGAAGATAAGTGGCTTACCTGTAACCTGTAATTGGAAGTGGTTGTA  
ATCTAGACTCTGCCGTTTCCGTTACCTAATTGGAGAAAAGTTGGGTGTCCACCCACAAGCTGCCATGG  
TTGGATTATTGGAGAACATGGTATTCTAGTGTGCCCTTATGGAGTGGGGTGAATGTTGCTGGTGTGCT  
CTGAAGACTCTGGACCCTAAATTAGGAACGATTACAGATAAGGAACACTGGAAAAATATCCATAAACAAG  
TTATTCAAAGTGCCTATGAAATATCAAGCTGAAGGGGTATACCTCTTGGGCTATTGGACTGTCTGTGAT  
GGATCTGGTAGGATCCATTTTAAAAATCTTAGGAGAGTGCACCCAGTTTCCACCATGGTTAAGGGATTA  
TATGGAATAAAAGAAGAAGTCTTTCTCAGTATCCCTTGTGTCTTGGGGCGGAATGGTGTCTCAGATGTTG  
TGAAAATTAACCTTGAATTCTGAGGAGGAGGCCCTTTTCAAGAAGAGTGCAGAAACACTTTGGAATATTCA  
AAAGGATCTAATATTT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC210627 protein sequence  
 Red=Cloning site Green=Tags(s)

MSTVKEQLIEKLIEDDENSQCKITIVGTGAVGMACAISILLKDLADELALVDVALDKLGEMMDLQHGSL  
 FFSTSKITSGKDYSVSANSRIVIVTAGARQQEGETRLALVQRNVAIMKSIIPAIVHYSPDCKILVSNPV  
 DILTYIVWKISGLPVTRVIGSGCNLDSARFRYLIGEKLGVHPTSCHGWIIGEHDSSVPLWSGVNVAGVA  
 LKTLDPKLGTDSDKEHWKNIHKQVIQSAYEIIKLGKGYTSAIIGLSVMDLVGSILKNLRRVHPVSTMVKGL  
 YGIKEELFLSIPCVLGRNGVSDVVKINLNSEEEALFKSAETLWNIQKDLIF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6367\\_f04.zip](https://cdn.origene.com/chromatograms/mk6367_f04.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_017448

**ORF Size:** 996 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\\_017448.4](#)

**RefSeq Size:** 1264 bp

**RefSeq ORF:** 999 bp

**Locus ID:** 3948

**UniProt ID:** [P07864](#)

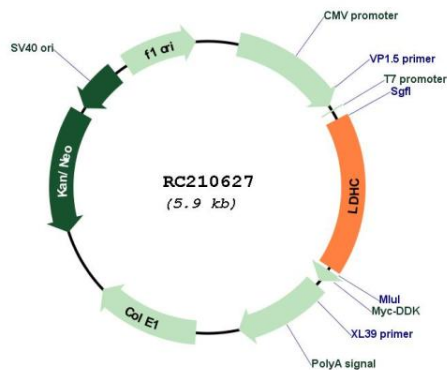
**Cytogenetics:** 11p15.1

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

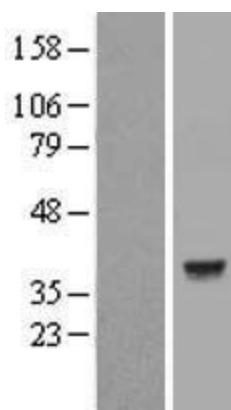
**MW:** 36.3 kDa

**Gene Summary:** Lactate dehydrogenase C catalyzes the conversion of L-lactate and NAD to pyruvate and NADH in the final step of anaerobic glycolysis. LDHC is testis-specific and belongs to the lactate dehydrogenase family. Two transcript variants have been detected which differ in the 5' untranslated region. [provided by RefSeq, Jul 2008]

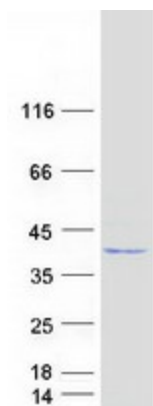
## Product images:



Circular map for RC210627



Western blot validation of overexpression lysate (Cat# [LY413747]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210627 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified LDHC protein (Cat# [TP310627]). The protein was produced from HEK293T cells transfected with LDHC cDNA clone (Cat# RC210627) using MegaTran 2.0 (Cat# [TT210002]).