

## Human Recombinant LDHA

<b>CATALOG #:</b>	6374-100	100 µg
<b>ALTERNATE NAMES:</b>	L-lactate dehydrogenase A chain, GSD11, LDH1, LDHM, PIG19.	
<b>SOURCE:</b>	E.Coli	
<b>PURITY:</b>	> 95% by SDS - PAGE	
<b>MOL. WEIGHT:</b>	38.8 kDa (352 aa, 1-332 aa + His-Tag)	
<b>FORMULATION:</b>	0.5 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 0.1 M NaCl and 20% glycerol.	

### STORAGE CONDITIONS:

Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

### DESCRIPTION:

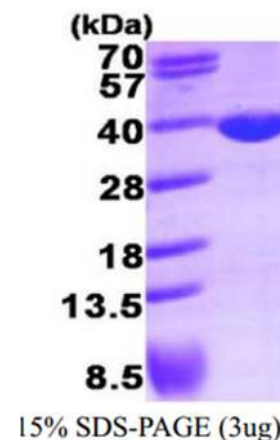
LDHA catalyzes the conversion of L-lactate and NAD to pyruvate and NADH in the final step of anaerobic glycolysis. LDHA is localized primarily in muscle tissue and is part of the lactate dehydrogenase family. Mutations in LDHA have been linked to exertional myoglobinuria. LDH1 is decreased in essential thrombocythemia. LDHA is induced through a non-genomic pathway of estrogen action. Reduction in LDH-A activity results in stimulation of mitochondrial respiration and decrease of mitochondrial membrane potential.

### AMINO ACID SEQUENCE:

MGSSHHHHHH SSGLVPRGSH MATLKDQLIY NLLKEEQTPQ NKITVVGVA VGMACAISIL  
MKDLADELAL VDVIEDKLKG EMMDLQHGS LFLRTPKIVSG KDYNVTANSK LVIITAGARQ  
QEGESRLNLV QRNVNIFKFI IPNVVKYSPN CKLLIVSNPV DILTYVAWKI SGFPKNRVIG  
SGCNLDSARF RYLMGERLGV HPLSCHGWVL GEHGDSSVPV WSGMNVAGVS  
LKTLPDLGT DKDKQWKEV HKQVVESAYE VIKLKGYSW AIGLSVADLA ESIMKNLRRV  
HPVSTMIKGL YGIKDDVFLS VPCILGQNGI SDLVKVTLS EEEARLKSA DTLWGIQKEL QF

### BIOLOGICAL ACTIVITY:

Specific activity is > 20 units/mg in which one unit will convert 1.0 µmole of pyruvate to L-lactate and β-NAD per minute at pH 7.5 at 37°C.



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### RELATED PRODUCTS:

- LDH-Cytotoxicity Assay kit (**Cat. No. K311-400**)
- LDH-Cytotoxicity Assay kit II (**Cat. No. K313-500**)
- Lactate Dehydrogenase (LDH) Activity Assay kit (**Cat. No. K726-500**)
- LDH Antibody (**Cat. No. 3842-500**)
- Human recombinant LDHB (**Cat. No. 6375-100**)

**FOR RESEARCH USE ONLY! Not to be used in humans.**