

Human Recombinant LDHA

CATALOG #:	6374-100	100 µg
ALTERNATE NAMES:	L-lactate dehydrogenase A chain, GSD11, LDH1, LDHM, PIG19.	
SOURCE:	E.Coli	
PURITY:	> 95% by SDS - PAGE	
MOL. WEIGHT:	38.8 kDa (352 aa, 1-332 aa + His-Tag)	
FORMULATION:	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:

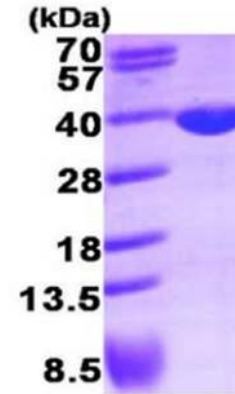
LDHA catalyzes the conversion of L-lactate and NAD to pyruvate and NADH in the final step of anaerobic glycolysis. LDHA is localized primarily in muscle tissue and is part of the lactate dehydrogenase family. Mutations in LDHA have been linked to exertional myoglobinuria. LDH1 is decreased in essential 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 SGLVPRGSH MATLKDQLIY NLLKEEQTPQ NKITVVGVA VGMACAISIL
MKDLADELAL VDIEDKLKG EMDLQHGSL FLRTPKIVSG KDYNVTANSK LVIITAGARQ
QEGESRLNLV QRNVNIFKI IPNVVKYSPN CKLLIVSNPV DILTYVAWKI SGFPKNRVIG
SGCNLDSARF RYLMGERLGV HPLSCHGWVL GEHGSSVPV WSGMNVAGVS
LKTLPDLGT DKDKEQWKEV HKQVVESAYE VIKLKGYSW AIGLSVADLA ESIMKNLRRV
HPVSTMIKGL YGIKDDVFLS VPCILGQNGI SDLVKVTLS EEEARLKKSA 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.



15% SDS-PAGE (3µg)

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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.