LDHA
Recombinant Human Lactate Dehydrogenase A

Catalog No.	CS126A	**Quantity:**	5 µg
	CS126B		25 µg
	CS126C		1.0 mg

Alternate Names: LDH-A, LDH1, LDHM, PIG19

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. Reduction in LDH-A activity results in stimulation of mitochondrial respiration and decrease of mitochondrial membrane potential. Human recombinant LDHA produced in E.Coli is a single, non-glycosylated polypeptide chain containing 352 amino acids (1-332 a.a.) with a molecular mass of 38.8 kDa. The LDHA is fused to a 20 amino acid tag at N-terminus containing HIS tag and thrombin cleavage site.

Gene ID: 3939

UniProtKB: P00338

Source: *E. coli*

Molecular Weight: 38.8 kDa

Formulation: Sterile filtered liquid in 20 mM Tris-HCl pH 8.0, 100 mM NaCl, 20% Glycerol.

Purity: >95% by SDS-PAGE

Purification: Conventional chromatography

Concentration: 500 µg/mL

Biological Activity: One unit will convert 1.0 µmole of pyruvate to L-lactate and beta-NAD per minute at pH 7.5 at 37 °C.

Specific Activity: > 20 U/mg

Amino Acid Sequence: MGSSHHHHHH SSGLVPRGSH MATLKDQLIY NLLKEEQTPQ NKITVVGVGA VGMACAISIL MKDLADELAL VDVIEDKLKG EMMDLQHGSL FLRTPKIVSG KDYNVTANSK LVIITAGARQ QEGESRLNLV QRNVNIFKFI IPNVVKYSPN CKLLIVSNPV DILTYVAWKI SGFPKNRVIG SGCNLDSARF RYLMGERLGV HPLSCHGWVL GEHGDSSVPV WSGMNVAGVS LKTLHPDLGT DKDKEQWKEV HKQVVESAYE VIKLKGYTSW AIGLSVADLA ESIMKNLRRV HPVSTMIKGL YGIKDDVFLS VPCILGQNGI SDLVKVTLTS EEEARLKKSA DTLWGIQKEL QF
(20 amino acid tag is underlined)

Storage & Stability: Store at 4 °C for up to one month or in working aliquots with 1% HSA or BSA at -20 °C. **Avoid repeated freeze-thaw cycles.**

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