

## 32-2501: LDHA Recombinant Protein

### Alternative Name :

LDH-A,GSD11,LDH1,LDHM,PIG19,EC 1.1.1.27,lactate dehydrogenase M, LDH-M,LDH-1,L-lactate dehydrogenase A chain,LDH muscle subunit,Renal carcinoma antigen NY-REN-59,Cell proliferation-inducing gene 19 protein,LDHA.

### Description

Source : Escherichia Coli. LDHA Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 352 amino acids (1-332 a.a.) and having a molecular mass of 38.8 kDa. The LDHA is fused to a 20 amino acid his tag at N-terminus and purified by conventional chromatography. 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.

### Product Info

**Amount :** 25 µg

**Purification :** Greater than 95.0% as determined by SDS-PAGE.

**Content :** The LDHA protein solution contains 20mM Tris-HCl pH-8, 100mM NaCl and 20% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MATLKDQLIY NLLKEEQTPQ NKITVVGVA VGMACAISIL MKDLADELAL VDVIEDKLLG EMMDLQHGSL FLRTPKIVSG KDYNVTANSK LVIITAGARQ QEGESRLNLV QRNVNIFKFI IPNVVKYSPN CKLLIVSNPV DILTYVAWKI SGFPKNRVIG SGCNLSARF RYLMGERLGV HPLSCHGWVL GEHGDSSVPV WSGMNVAGVS LKTLHPDLGT DKDKEQWKEV HKQVVESAYE VIKLKGYSW AIGLSVADLA ESIMKNLRRV HPVSTMIKGL YGIKDDVFLS VPCILGQNGI SDLVKVTLTS EEEARLKKSA DTLWGIQKEL QF.

### Application Note

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

