

## 32-6829: LDHA Mouse

**Application :** Functional Assay

**Alternative Name :** L-lactate dehydrogenase A chain, LDH-A, LDH muscle subunit, LDH-M.

### Description

Source: Sf9, Baculovirus cells.

Sterile Filtered colorless solution.

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.

LDHA Mouse Recombinant produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 340 amino acids (1-332a.a.) and having a molecular mass of 37.5kDa (Molecular size on SDS-PAGE will appear at approximately 28-40kDa). LDHA is expressed with an 8 amino acid His tag at C-Terminus and purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

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

**Content :** LDHA protein solution (0.5mg/ml) containing Phosphate Buffered Saline (pH 7.4) and 10% 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 :** MATLKDQLIV NLLKEEQAPQ NKITVVGVA VGMAAISIL MKDLADELAL VDVMDKLGK EMDLQHGSL  
FLKTPKIVSS KDYCVTANSK LVIITAGARQ QEGESRLNLV QRNVNIFKFI IPNIVKYSPP CKLLIVSNPV  
DILTYVAWKI SGFPKNRIG SGCNLD SARF RYLMGERLGV HALSCHGWVL GEHGDSSVPV  
WSGVNVAGVS LKSLNPELGT DADKEQWKEV HKQVVD SAYE VIKLKGYSW AIGLSVADLA ESIMKNLRRV  
HPISTMIKGL YGINEDVFLS VPCILGQNGI SDVVKVTLTP EEEARLKSA DTLWGIQKEL QFLEHHHHHH.

### Application Note

Specific activity is > 250 units/mg, and is defined as the Amount of enzyme that convert 1.0 umole of pyruvate to L-lactate and per minute at pH 7.5 at 37C.