

# Recombinant human Lactate Dehydrogenase A/LDHA protein

Catalog Number: ATGP0488

## PRODUCT INFORMATION

---

### Expression system

E.coli

### Domain

1-332aa

### UniProt No.

P00338

### NCBI Accession No.

NP\_005557

### Alternative Names

Lactate dehydrogenase A, L-lactate dehydrogenase A chain, Cell proliferation-inducing gene 19 protein, PIG19, LDH muscle subunit, LDH-M, Renal carcinoma antigen NY-REN-59

## PRODUCT SPECIFICATION

---

### Molecular Weight

38.8 kDa (352aa) confirmed by MALDI-TOF

### Concentration

0.5mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 0.1M NaCl

### Purity

> 95% by SDS-PAGE

### Biological Activity

Specific activity is > 300unit/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 37C.

### Tag

His-Tag

### Application

SDS-PAGE, Enzyme Activity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

---

### Description

LDHA, also known as L-lactate dehydrogenase A chain, is an enzyme that catalyzes the conversion of L-lactate and NAD<sup>+</sup> to pyruvate and NADH in the final step of anaerobic glycolysis. This protein is found predominantly in

# Recombinant human Lactate Dehydrogenase A/LDHA protein

Catalog Number: ATGP0488

muscle tissue and belongs to the lactate dehydrogenase family. Mutations in LDHA have been linked to exertional myoglobinuria. Recombinant LDHA protein was expressed in *E. coli* and purified by using conventional chromatography techniques.

## Amino acid Sequence

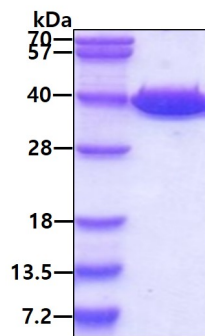
<MGSSHHHHHH SSGLVPRGSH> MATLKDQLIY NLLKEEQTPQ NKITVVGVA VGMACAISIL MKDLADELAL  
VDVIEDKLGK EMMDLQHGS LFLRTPKIVSG KDYNVTANSK LVIITAGARQ QEGESRLNLV QRNVNIFKFI IPNVVKYSPN  
CKLLIVSNPV DILTYVAWKI SGFPKNRVIG SGCNLD SARF RYLMGERLGV HPLSCHGWVL GEHGDSSVPV WSGMNVAGVS  
LKTLHPDLGT DKDK EQWKEV HKQV VESAYE VIKLKG YTSW AIGLSVADLA ESIMKNLRRV HPVSTMIKGL YGIKDDVFLS  
VPCILGQNGI SDLVKVTLTS EEEARLKKSA DTLWGIQKEL QF

## General References

Gosti F, et al. (1987) Proc. Natl. Acad. Sci. u.S.A. 84(4):1000-4  
Chung FZ, et al. (1985) Biochem. J. 231(3):537-41.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain