

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⁺ to pyruvate and NADH in the final step of anaerobic glycolysis. This protein is found predominantly in

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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

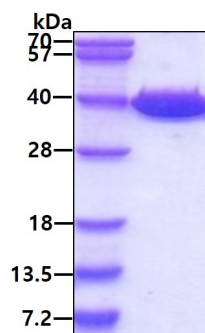
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CKLLIVSNPV DILTYVAWKI SGFPKNRVIG SGCNLD SARF RYLMGERLGV HPLSCHGWVL GEHGDSSVPV WSGMNVAGVS
LKTLPDLGT DKDKEQWKEV HKQVVE SAYE VIKLKG YTSW AIGLSVADLA ESIMKNLRRV HPVSTMIKGL YGIKDDVFLS
VPCILGQNGI SDLVKVTLTS EEEARLK KSA DTLWGIQKEL QF

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