Recombinant rat Lactate Dehydrogenase A/LDHA protein

Catalog Number: ATGP3368

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
1-332aa

UniProt No.
P04642

NCBI Accession No.
NP_058721

Alternative Names
LDH muscle subunit, LDH-M

PRODUCT SPECIFICATION

Molecular Weight
37.5 kDa (340aa)

Concentration
0.25mg/ml (determined by absorbance at 280nm)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 1mM DTT, 20% glycerol

Purity
> 95% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity
Specific activity is > 200unit/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

Recombinant rat Lactate Dehydrogenase A/LDHA protein

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Description

Ldha, also known as lactate dehydrogenase A, catalyzes the conversion of pyruvate to lactate, utilizing NADH as a cofactor. It has been identified as a potential therapeutic target in the area of cancer metabolism. Reduction in Ldha activity resulted in stimulation of mitochondrial respiration and decrease of mitochondrial membrane potential. Recombinant rat Ldha, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

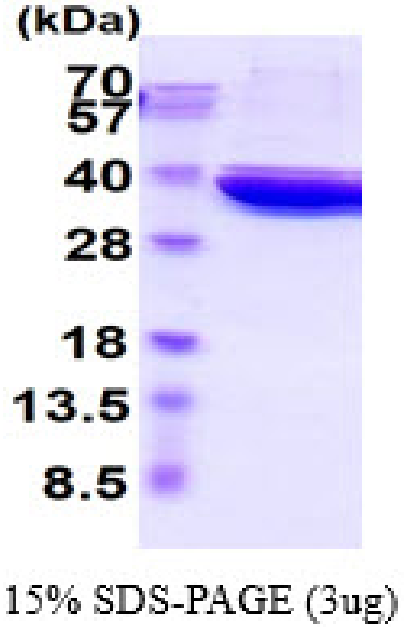
MAALKDQLIV NLLKEEQVPQ NKITVVGVGA VGMACAISIL MKDLADELAL VDVIEDKLKG EMMDLQHGSL FLKTPKIVSS KDYSVTANSK LVIITAGARQ QEGESRLNLV QRNVNIFKFI IPNVVKYSPQ CKLLIVSNPV DILTYVAWKI SGFPKNRVIG SGCNLDSARF RYLMGERLGV HPLSCHGWVL GEHGDSSVPV WSGVNVAGVS LKSLNPQLGT DADKEQWKDV HKQVVDSAYE VIKLKGYTSW AIGLSVADLA ESIMKNLRRV HPISTMIKGL YGIKEDVFLS VPCILGQNGI SDVVKVTLTP DEEARLKKSA DTLWGIQKEL QFLEHHHHHH

General References

Ward RA., et al. (2012) J Med Chem. 55:3285-3306.
Fantin VR., et al. (2006) Cancer Cell. 9:425-434.

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

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