

## Product datasheet for **AR09387PU-L**

### LDHA (1-332, His-tag) Human Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	LDHA (1-332, His-tag) human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SSGLVPRGSH</u> MATLKDQLIY NLLKEEQTPQ NKITVGVGA VGMACAISIL MKDLADELAL VDVIEDKLKG EMDLQHGSL FLRTPKIVSG KDYNVTANSK LVIITAGARQ QEGESRLNLV QRNVNIFKFI IPNVVKYSPN CKLLIVSNPV DILTYVAWKI SGFPKNRVIG SGCNLD SARF RYLMGERLGV HPLSCHGWVL GEHGDSSVPV WSGMNVAGVS LKTLHPDLGT DKDKEQWKEV HKQWVESAYE VIKLKGYSW AIGLSVADLA ESIMKNLRRV HPVSTMIKGL YGIKDDVFLS VPCILGQNGI SDLVKVTLS EEEARLKKA DTLWGIQKEL QF
Tag:	His-tag
Predicted MW:	38.8 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 0.1 M NaCl
Bioactivity:	Biological: 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 (see "Protocols").
Preparation:	Liquid purified protein



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<b>Applications:</b>	<p>Protocol: <b>Activity Assay</b></p> <ol style="list-style-type: none"><li>1. Prepare a 1.5 ml reaction mix into a suitable container, adjust to pH 7.5 at 37°C and pre-chill on ice before use: The final concentrations are 100 mM Sodium phosphate, 0.12 mM beta-nicotinamide adenine dinucleotide, reduced form, 2.3 mM Pyruvate, 0.033% (w/v) bovine serum albumin.</li><li>2. Equilibrate to 37°C and monitor at A340nm until the value is constant using a spectrophotometer</li><li>3. Add 50ul of recombinant LDHA protein in various concentrations (0.1ug, 0.5ug) in assay buffer.</li><li>4. Mix by inversion and record the increase at A340nm for 5 minutes.</li></ol>
<b>Protein Description:</b>	Recombinant LDHA protein, fused to His-tag, was expressed in E.coli and purified by using conventional chromatography techniques.
<b>Storage:</b>	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>RefSeq:</b>	<a href="#">NP_001128711</a>
<b>Locus ID:</b>	3939
<b>UniProt ID:</b>	<a href="#">P00338</a>
<b>Cytogenetics:</b>	11p15.1
<b>Synonyms:</b>	GSD11; HEL-S-133P; LDHM; PIG19
<b>Summary:</b>	The protein encoded by this gene catalyzes the conversion of L-lactate and NAD to pyruvate and NADH in the final step of anaerobic glycolysis. The protein is found predominantly in muscle tissue and belongs to the lactate dehydrogenase family. Mutations in this gene have been linked to exertional myoglobinuria. Multiple transcript variants encoding different isoforms have been found for this gene. The human genome contains several non-transcribed pseudogenes of this gene. [provided by RefSeq, Sep 2008]
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Cysteine and methionine metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways, Propanoate metabolism, Pyruvate metabolism

## Product images:

