

Native Bovine Pyruvate Dehydrogenase (lipoamide) Beta

Cat. No. PDHB-1860B Lot. No. (See product label)

SPECIFICATION

| | |
|-------------------------|---|
| Product Overview | Native Bovine PDHB was expressed in bovine heart. |
| Species | Bovine |
| Source | Bovine Heart |
| Description | <p>PDHB, also known as pyruvate dehydrogenase E1 component subunit beta, mitochondrial or PDHE1-B is an enzyme that in humans is encoded by the PDHB gene. The PDHB is a nuclear-encoded mitochondrial multienzyme complex that catalyzes the overall conversion of pyruvate to acetyl-CoA and CO₂, and provides the primary link between glycolysis and the tricarboxylic acid (TCA) cycle. The PDH complex is composed of multiple copies of three enzymatic components: pyruvate dehydrogenase (E1), dihydrolipoamide acetyltransferase (E2) and lipoamide dehydrogenase (E3). The E1 enzyme is a heterotetramer of two alpha and two beta subunits. This gene encodes the E1 beta subunit.</p> |
| Form | Liquid in 50 mM Tris-HCl, pH 7.0 + 14 mM β-mercaptoethanol + 1 mM benzamidine + 0.1 mM phenylmethanesulfonyl fluoride + 1 mM EDTA + 10% glycerol |
| Purity | > 90% as determined by SDS-PAGE analysis, subunit apparent Mr's ~ 74,000 (E2), 53,000 (E3), 41,000 (E1a), 48,000 (E3-BP) and 36,000 (E1b). Apparent Mr ~ 8,500,000 by sedimentation equilibrium centrifugation. |
| Concentration | 0.2 mg/ml |

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

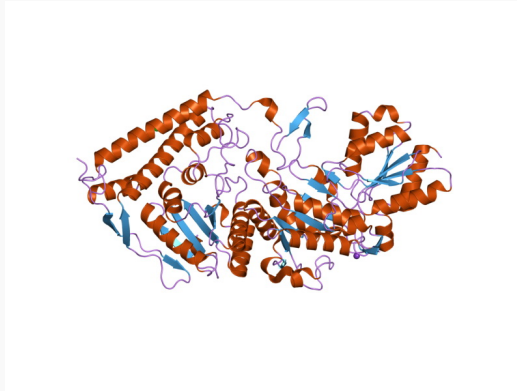
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|--------------------------|--|
| Specific Activity | 12-18 μmol of NADH formed per minute per mg of protein with pyruvate as substrate. |
| Storage | Store in working aliquots at -80°C. Avoid repeated freeze-thaw cycles. |
| Official Symbol | PDHB |
| GENE INFORMATION | |
| Gene Name | PDHB pyruvate dehydrogenase(lipoamide) beta [<i>Bos taurus</i>] |
| Synonyms | PDHB; pyruvate dehydrogenase (lipoamide) beta; pyruvate dehydrogenase E1 component subunit beta, mitochondrial; PDHE1-B; EC 1.2.4.1; PDHA; PDHAL; PDHCE1A; PHE1A; PHE1 |
| Gene ID | 613610 |
| mRNA Refseq | NM_001035435 |
| Protein Refseq | NP_001030512 |
| UniProt ID | P11966 |
| Pathway | Butanoate metabolism; Citrate cycle (TCA cycle); Glycolysis/Gluconeogenesis; Metabolic pathways; Pyruvate metabolism; Pyruvate metabolism and Citric Acid (TCA) cycle; Pyruvate oxidation, pyruvate => acetyl-CoA; Regulation of pyruvate dehydrogenase (PDH) complex; The citric acid (TCA) cycle and respiratory electron transport; Valine, leucine and isoleucine biosynthesis; Valine, leucine and isoleucine biosynthesis; pyruvate dehydrogenase complex; superpathway of acetyl-CoA biosynthesis |
| Function | oxidoreductase activity; pyruvate dehydrogenase (acetyl-transferring) activity |

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PDB rendering
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