

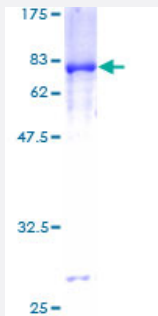
Full-Length

PDHA1 (Human) Recombinant Protein (P01)

Catalog # H00005160-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human PDHA1 full-length ORF (AAH02406, 1 a.a. - 390 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MRKMLAAVSRVLSGASQKPASRVLVASRNFANDATFEIKKCDLHRLEEGPPVTTVL TREDGLKYY
RMMQTVRRMELKADQLYKQKIIRGFCHLCDGQEACCVGLEAGINPTDHLITAYRAHGFTFTRGLSV
REILAE LTGRKGGCAKGKGGSMHMYAKNFYGGNGIVGAQVPLGAGIALACKYNGKDEVCLTYGD
GAANQQQIFEAYNMAALWKLPCIFICENNRYGMGTSVERAAASTDYKRGDFIPGLRVDGMDILCV
REATRFAAAAYCRSGKGPILMELQTYRYHGHSMSPGVSYRTREEIQEVRSKSDPIMLLKDRMVNS
NLASVEELKEIDVEVRKEIEDAAQFATADPEPPLEELGYHIYSSDPPFEVRGANQWIKFSVS

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

68.64

Interspecies Antigen Sequence

Mouse (98); Rat (98)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — PDHA1

Entrez GeneID[5160](#)**GeneBank Accession#**[BC002406](#)**Protein Accession#**[AAH02406](#)**Gene Name**

PDHA1

Gene Alias

PDHA, PDHCE1A, PHE1A

Gene Description

pyruvate dehydrogenase (lipoamide) alpha 1

Omim ID[300502](#) [308930](#) [312170](#)**Gene Ontology**[Hyperlink](#)**Gene Summary**

The pyruvate dehydrogenase complex is a nuclear-encoded mitochondrial matrix multienzyme complex that provides the primary link between glycolysis and the tricarboxylic acid (TCA) cycle by catalyzing the irreversible conversion of pyruvate into acetyl-CoA. The PDH complex is composed of multiple copies of 3 enzymes: E1 (PDHA1); dihydrolipoyl transacetylase (DLAT; MIM 608770) (E2; EC 2.3.1.12); and dihydrolipoyl dehydrogenase (DLD; MIM 238331) (E3; EC 1.8.1.4). The E1 enzyme is a heterotetramer of 2 alpha and 2 beta subunits. The E1-alpha subunit contains the E1 active site and plays a key role in the function of the PDH complex (Brown et al., 1994 [PubMed 7853374]).[supplied by OMIM]

Other Designations

OTTHUMP00000023015|pyruvate dehydrogenase E1 alpha subunit

Pathway

- [Biosynthesis of alkaloids derived from histidine and purine](#)
- [Biosynthesis of alkaloids derived from ornithine](#)
- [Biosynthesis of alkaloids derived from shikimate pathway](#)
- [Biosynthesis of alkaloids derived from terpenoid and polyketide](#)
- [Biosynthesis of phenylpropanoids](#)
- [Biosynthesis of plant hormones](#)
- [Biosynthesis of terpenoids and steroids](#)
- [Butanoate metabolism](#)
- [Citrate cycle \(TCA cycle\)](#)
- [Glycolysis / Gluconeogenesis](#)
- [Metabolic pathways](#)
- [Pyruvate metabolism](#)
- [Valine](#)