

## Product datasheet for PH306640

### Pyruvate Dehydrogenase E2 (DLAT) (NM\_001931) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	DLAT MS Standard C13 and N15-labeled recombinant protein (NP_001922)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC206640
Predicted MW:	69 kDa
Protein Sequence:	>RC206640 representing NM_001931 Red=Cloning site Green=Tags(s)

MWRVCARRAQNVPWAGLEARWTALQEVPGTPRVTSRSGPAPARRNSVTTGYGGVRALCGWTPSSGATPR  
NRLLLQLLGSPGRRYSLPPHQVPLPSLSPTMQAGTIARWEKKEGDKINEGDLIAEVETDKATVGFESL  
EECYMAKILVAEGTRDVPIGAIICITVGGKPEDIEAFKNYLDSSAAPTQAAAPATPAATASPPTPSAQA  
PGSSYPHMQVLLPALSPTMTMGTVQRWEKKVGEKLSGDLLAEIETDKATIGFEVQEEGYLAKILVPEG  
TRDVPLGTPLCIIVEKEADISAFADYRPTVETDLKPQVPPPTPPPVAAPVPTPQPLAPTPSAPCPATPAG  
PKGRVFSPLAKKLAVEKGIDLQVKGTGPDGRITKKDIDSFVPSKVAPAPAAVPPPTGPGMAPVPTGVF  
TDIPI SNIRRVIAQRLMQSKQTI PHYYSIDVNMGEVLLVRKELNKILEGRSKISVNDFI IKASALACKL  
VPEANSSWMDTVIRQNHVVVDVSAVSTPAGLITPIVFNHAIKGVETIANDVVSLATKAREGKLQPHEFQG  
GFTTISNLGMFGIKNFSAIINPPQACILAI GASEDKLVPADNEKGFVDASMMSVTLSCDHRVVDGAVGAQ  
WLAEFRKYLEKPIITMLL

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<a href="#">NP_001922</a>
RefSeq Size:	3321



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RefSeq ORF: 1941

Synonyms: DLTA; E2; PBC; PDC-E2; PDCE2

Locus ID: 1737

UniProt ID: [P10515](#), [Q86YI5](#)

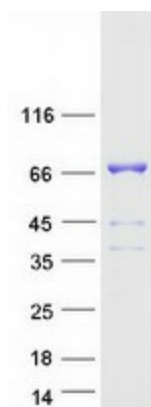
Cytogenetics: 11q23.1

**Summary:** This gene encodes component E2 of the multi-enzyme pyruvate dehydrogenase complex (PDC). PDC resides in the inner mitochondrial membrane and catalyzes the conversion of pyruvate to acetyl coenzyme A. The protein product of this gene, dihydrolipoamide acetyltransferase, accepts acetyl groups formed by the oxidative decarboxylation of pyruvate and transfers them to coenzyme A. Dihydrolipoamide acetyltransferase is the antigen for antimitochondrial antibodies. These autoantibodies are present in nearly 95% of patients with the autoimmune liver disease primary biliary cirrhosis (PBC). In PBC, activated T lymphocytes attack and destroy epithelial cells in the bile duct where this protein is abnormally distributed and overexpressed. PBC eventually leads to cirrhosis and liver failure. Mutations in this gene are also a cause of pyruvate dehydrogenase E2 deficiency which causes primary lactic acidosis in infancy and early childhood.[provided by RefSeq, Oct 2009]

**Protein Families:** Druggable Genome

**Protein Pathways:** Citrate cycle (TCA cycle), Glycolysis / Gluconeogenesis, Metabolic pathways, Pyruvate metabolism

### Product images:



Coomassie blue staining of purified DLAT protein (Cat# [TP306640]). The protein was produced from HEK293T cells transfected with DLAT cDNA clone (Cat# [RC206640]) using MegaTran 2.0 (Cat# [TT210002]).