



## **Human DLAT peptide (DAG-P0042)**

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Antigen</b>	<b>Description</b>
AIIUGEII	Describition

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 enventually 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]

Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the 2-oxoacid dehydrogenase family. Contains 2 lipoyl-binding domains.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

## **GENE INFORMATION**

Gene Name DLAT dihydrolipoamide S-acetyltransferase [Homo sapiens (human)]

Official Symbol DLAT

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## **Synonyms**

DLAT; dihydrolipoamide S-acetyltransferase; DLTA; PDCE2; PDC-E2; dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial; PBC; M2 antigen complex 70 kDa subunit; pyruvate dehydrogenase complex component E2; E2 component of pyruvate dehydrogenase complex; 70 kDa mitochondrial autoantigen of primary biliary cirrhosis; dihydrolipoamide acetyltransferase component of pyruvate dehydrogenase complex; dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex mitochondrial;

	complex mitochondrial;
Entrez Gene ID	1737
mRNA Refseq	NM_001931.4
Protein Refseq	NP 001922.2
UniProt ID	P10515
Chromosome Location	11q23.1
Pathway	Carbon metabolism, organism-specific biosystem; Carbon metabolism, conserved biosystem; Citrate cycle (TCA cycle), organism-specific biosystem; Citrate cycle (TCA cycle), conserved biosystem; Glycolysis / Gluconeogenesis, organism-specific biosystem; Glycolysis / Gluconeogenesis, conserved biosystem; Glycolysis and Gluconeogenesis, organism-specific biosystem; Metabolism, organism-specific biosystem; Pyruvate metabolism, organism-specific biosystem; Pyruvate metabolism, organism-specific biosystem;
Function	dihydrolipoyllysine-residue acetyltransferase activity; protein binding;