

#### **DLAT Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP5341B

#### **Specification**

## **DLAT Antibody (C-term) - Product Information**

**Application** FC, IHC-P, WB,E **Primary Accession** P10515 Other Accession NP 001922.2 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 68997

#### **DLAT Antibody (C-term) - Additional Information**

#### **Gene ID 1737**

Antigen Region

#### **Other Names**

Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial, 70 kDa mitochondrial autoantigen of primary biliary cirrhosis, PBC, Dihydrolipoamide acetyltransferase component of pyruvate dehydrogenase complex, M2 antigen complex 70 kDa subunit, Pyruvate dehydrogenase complex component E2, PDC-E2, PDCE2, DLAT, DLTA

579-607

#### **Target/Specificity**

This DLAT antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 579-607 amino acids from the C-terminal region of human DLAT.

#### **Dilution**

FC~~1:10~50 IHC-P~~1:10~50 WB~~1:1000

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

DLAT Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.



# **DLAT Antibody (C-term) - Protein Information**

Name DLAT (HGNC:2896)

**Synonyms DLTA** 

**Function** As part of the pyruvate dehydrogenase complex, catalyzes the transfers of an acetyl group to a lipoic acid moiety (Probable). The pyruvate dehydrogenase complex, catalyzes the overall conversion of pyruvate to acetyl-CoA and CO(2), and thereby links cytoplasmic glycolysis and the mitochondrial tricarboxylic acid (TCA) cycle (Probable).

#### **Cellular Location**

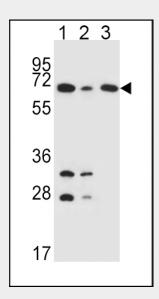
Mitochondrion matrix {ECO:0000250|UniProtKB:P08461}

## **DLAT Antibody (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

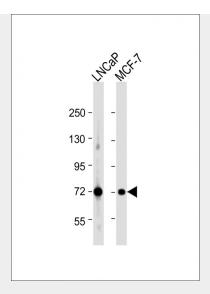
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## **DLAT Antibody (C-term) - Images**

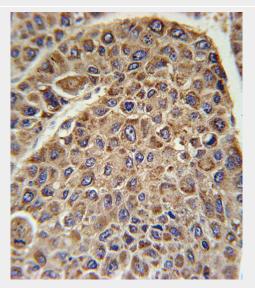


DLAT Antibody (C-term) (Cat. #AP5341b) western blot analysis in K562(lane 1),HepG2(lane 2),Jurkat(lane 3) cell line lysates (35ug/lane).This demonstrates the DLAT antibody detected the DLAT protein (arrow).



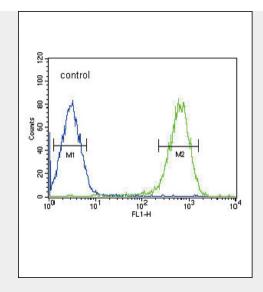


All lanes : Anti-DLAT Antibody (C-term) at 1:1000 dilution Lane 1: LNCaP whole cell lysate Lane 2: MCF-7 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 69 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



DLAT Antibody (C-term) (Cat. #AP5341b) immunohistochemistry analysis in formalin fixed and paraffin embedded human hepatocarcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the DLAT Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.





DLAT Antibody (C-term) (Cat. #AP5341b) flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# **DLAT Antibody (C-term) - Background**

DLAT 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.

## **DLAT Antibody (C-term) - References**

Trynka, G., et al. Gut 58(8):1078-1083(2009) Lleo, A., et al. Hepatology 49(3):871-879(2009) Korotchkina, L.G., et al. FEBS Lett. 582(3):468-472(2008)