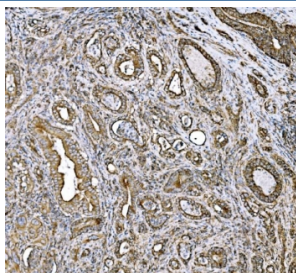


DLAT Antibody / Pyruvate Dehydrogenase E2 (RQ6548)

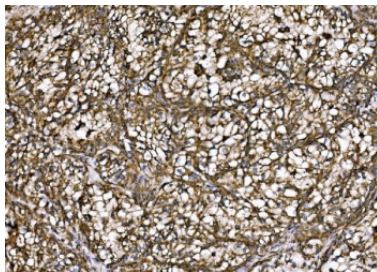
Catalog No.	Formulation	Size
RQ6548	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

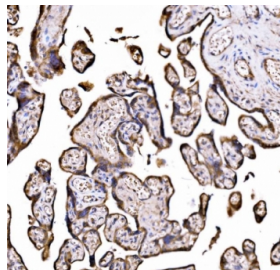
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P10515
Localization	Cytoplasmic
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This DLAT antibody is available for research use only.



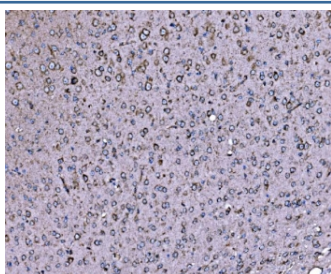
IHC staining of FFPE human liver cancer tissue with DLAT antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



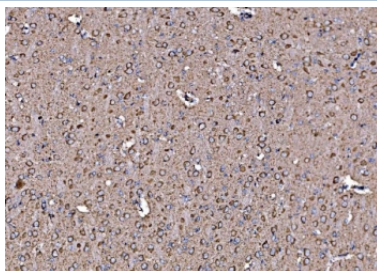
IHC staining of FFPE human renal clear cell carcinoma tissue with DLAT antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



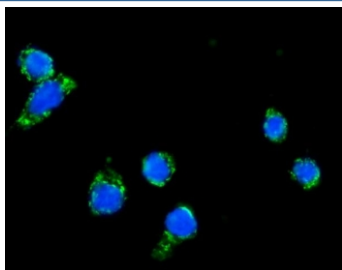
IHC staining of FFPE human placental tissue with DLAT antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



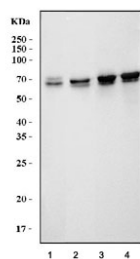
IHC staining of FFPE mouse brain tissue with DLAT antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



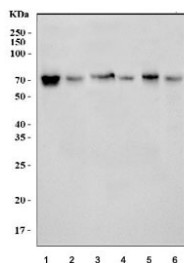
IHC staining of FFPE rat brain tissue with DLAT antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



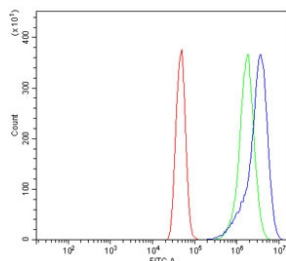
Immunofluorescent staining of FFPE human Caco-2 cells with DLAT antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HeLa, 2) HepG2, 3) K562 and 4) T-47D cell lysate with DLAT antibody. Predicted molecular weight ~69 kDa.



Western blot testing of 1) rat brain, 2) rat kidney, 3) mouse brain, 4) mouse kidney, 5) mouse testis and 6) mouse NIH 3T3 cell lysate with DLAT antibody. Predicted molecular weight ~69 kDa.



Flow cytometry testing of human A431 cells with DLAT antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= DLAT antibody.

Description

Dihydrolipoyl transacetylase (or dihydrolipoamide acetyltransferase) is an enzyme component of the multienzyme pyruvate dehydrogenase complex. 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.

Application Notes

Optimal dilution of the DLAT antibody should be determined by the researcher.

Immunogen

An E. coli-derived human protein (amino acids P69-P642) was used as the immunogen for the DLAT antibody.

Storage

After reconstitution, the DLAT antibody can be stored for up to one month at 4°C. For long-term, aliquot and store at -20°C. Avoid repeated freezing and thawing.