

DLST Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55039

Specification

DLST Polyclonal Antibody - Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P36957
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human DLST
Epitope Specificity	201-300/453
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Mitochondrion.
SIMILARITY	Belongs to the 2-oxoacid dehydrogenase family. Contains 1 lipoyl-binding domain. Forms a 24-polypeptide structural core with octahedral symmetry.
SUBUNIT	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Important Note	

Background Descriptions

The 2-oxoglutarate dehydrogenase complex catalyzes the overall conversion of 2-oxoglutarate to succinyl-CoA and CO₂. The complex contains multiple copies of three enzymatic components: 2-oxoglutarate dehydrogenase (E1), dihydrolipoamide succinyltransferase (E2) and lipoamide dehydrogenase (E3). DLST (dihydrolipoyllysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex, mitochondrial), also known as DLTS or 2-oxoglutarate dehydrogenase complex component E2, is a 453 amino acid protein belonging to the 2-oxoacid dehydrogenase family. DLST covalently binds one lipoyl cofactor and participates in L-lysine degradation via the saccharopine pathway. Localized to the mitochondrion, DLST forms a 24-polypeptide structural core with octahedral symmetry. The gene encoding DLST maps to human chromosome 14q24.3 and mouse chromosome 12 D2.

DLST Polyclonal Antibody - Additional Information

Gene ID 1743

Other Names

Dihydrolipoyllysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex, mitochondrial, 2.3.1.61, 2-oxoglutarate dehydrogenase complex component E2,

OGDC-E2, Dihydrolipoamide succinyltransferase component of 2-oxoglutarate dehydrogenase complex, E2K, DLST, DLTS

Dilution

WB~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

DLST Polyclonal Antibody - Protein Information

Name DLST ([HGNC:2911](#))

Synonyms DLTS

Function

Dihydrolipoamide succinyltransferase (E2) component of the 2-oxoglutarate dehydrogenase complex. The 2-oxoglutarate dehydrogenase complex catalyzes the overall conversion of 2-oxoglutarate to succinyl-CoA and CO(2). The 2-oxoglutarate dehydrogenase complex is mainly active in the mitochondrion (PubMed:29211711, PubMed:30929736). A fraction of the 2-oxoglutarate dehydrogenase complex also localizes in the nucleus and is required for lysine succinylation of histones: associates with KAT2A on chromatin and provides succinyl-CoA to histone succinyltransferase KAT2A (PubMed:29211711).

Cellular Location

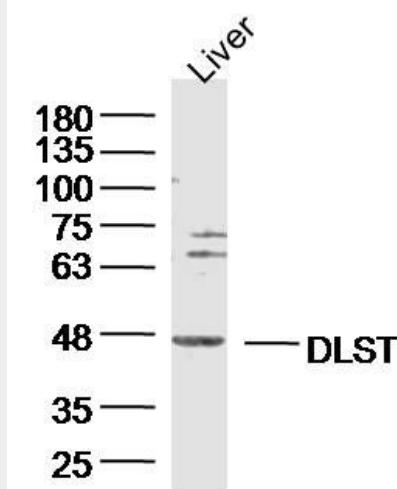
Mitochondrion matrix. Nucleus Note=Mainly localizes in the mitochondrion. A small fraction localizes to the nucleus, where the 2-oxoglutarate dehydrogenase complex is required for histone succinylation.

DLST Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

DLST Polyclonal Antibody - Images



Sample: Liver (Mouse) Lysate at 40 ug
Primary: Anti-DLST (bs-13008R) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 41 kD
Observed band size: 47 kD