

**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	<a href="#">P36957</a>
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
<b>Purity</b>	
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.
SUBUNIT	Forms a 24-polypeptide structural core with octahedral symmetry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

**Background Descriptions**

The 2-oxoglutarate dehydrogenase complex catalyzes the overall conversion of 2-oxoglutarate to succinyl-CoA and CO<sub>2</sub>. The complex contains multiple copies of three enzymatic components: 2-oxoglutarate dehydrogenase (E1), dihydrolipoamide succinyltransferase (E2) and lipoamide dehydrogenase (E3). DLST (dihydrolipoalysine-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**

Dihydrolipoalysine-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

<span class = "dilution\_WB">WB~~1:1000</span><br \><span class = "dilution\_IHC-P">IHC-P~~N/A</span><br \><span class = "dilution\_IHC-F">IHC-F~~N/A</span><br \><span class = "dilution\_IF">IF~~1:50~200</span><br \><span class = "dilution\_E">E~~N/A</span>

#### 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:<a href="http://www.uniprot.org/citations/29211711" target="\_blank">29211711</a>, PubMed:<a href="http://www.uniprot.org/citations/30929736" target="\_blank">30929736</a>). 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:<a href="http://www.uniprot.org/citations/29211711" target="\_blank">29211711</a>).

#### Cellular Location

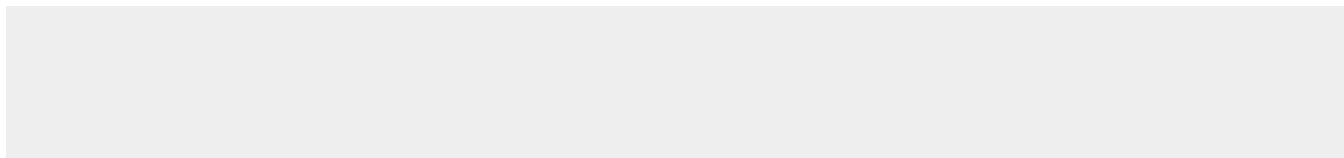
Mitochondrion matrix. Nucleus Note=Mainly localizes in the mitochondrion. A small fraction localizes to the nucleus, where the 2-oxoglutarate dehydrogenase complex is required for histone succinylation.

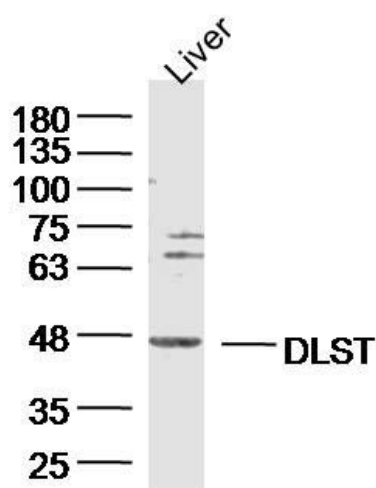
### DLST Polyclonal Antibody - Protocols

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