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DLST Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55039

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	P36957
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	48755
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.
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 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.

Additional Information

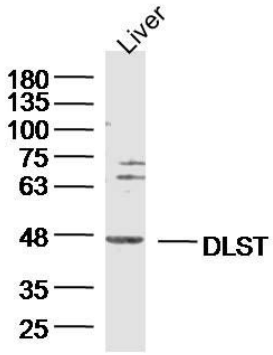
Gene ID	1743
Other Names	Dihydrolipoyllysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex, mitochondrial, 2.3.1.61, 2-oxoglutarate dehydrogenase complex component E2, OGDC-E2, Dihydrolipoamide succinyltransferase component of 2-oxoglutarate dehydrogenase complex, E2K, DLST, DLTS

Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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.

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.

Images



Sample: Liver (Mouse) Lysate at 40 ug
Primary: Anti-DLST (AP55039) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 41 kD
Observed band size: 47 kD