

## Canine Dihydrolipoyl dehydrogenase (DLD) ELISA Kit

Catalog No: #EK10640



Package Size: #EK10640-1 48T #EK10640-2 96T

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

Product Name	Canine Dihydrolipoyl dehydrogenase (DLD) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Canine (Canis familiaris; Dog)
Other Names	tcag7.39; DLDH; E3; GCSL; LAD; PHE3; E3 component of pyruvate dehydrogenase complex; 2-oxo-glutarate complex; branched chain keto acid dehydrogenase complex OTTHUMP00000206749 diaphorase dihydrolipo
Accession No.	P49819
Uniprot	P49819
GenID	403978;
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition.  The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

## Application Details

Detect Range:Request Information

Sensitivity:Request Information

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 µL

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

**Detection Method:**SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate DLD in samples. An antibody specific for DLD has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyDLD present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for DLD is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of DLD bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**The dihydrolipoate, still bound to a lysine residue of the complex, then migrates to the dihydrolipoyl dehydrogenase (E3) active site where it undergoes a flavin-mediated oxidation, identical in chemistry to disulfide isomerase. First, FAD oxidizes dihydrolipoate back to its lipoate resting state, producing FADH<sub>2</sub>.

Dihydrolipoamide dehydrogenase is the L protein of the mitochondrial glycine cleavage system. The L protein, also named dihydrolipoamide dehydrogenase, is also a component of the pyruvate dehydrogenase complex, the alpha-ketoglutarate dehydrogenase complex, and the branched-chain alpha-keto acids dehydrogenase complex. Mutations in this gene have been identified in patients with E3-deficient maple syrup urine disease and lipoamide dehydrogenase deficiency.

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Note: This product is for in vitro research use only