Mouse Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial (PDHA1) ELISA Kit

Catalog No: #EK8607

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Package Size: #EK8607-1 48T #EK8607-2 96T

Description

Product Name	Mouse Pyruvate dehydrogenase E1 component subunit alpha, somatic form, mitochondrial (PDHA1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	RP11-723P2.1; PDHA; PDHCE1A; PHE1A; PDHE1-A type I|pyruvate dehydrogenase E1 alpha 1|pyruvate dehydrogenase E1 alpha subunit|pyruvate dehydrogenase E1 component subunit alpha; somatic form; mitochon
Accession No.	P35486
Uniprot	P35486
GeneID	18597;
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:78.12-5000 pg/mL

Sensitivity:34 pg/mL

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 PDHA1 in samples. An antibody specific for PDHA1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPDHA1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PDHA1 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 PDHA1 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:The pyruvate dehydrogenase complex is a nuclear-encoded mitochondrial matrix multienzyme complex that provides the primary link between glycolysis and the tricarboxylic acid (TCA) cycle by catalyzing the irreversible conversion of pyruvate into acetyl-CoA. The PDH complex is composed of multiple copies of 3 enzymes: E1 (PDHA1); dihydrolipoyl transacetylase (DLAT) (E2);

and dihydrolipoyl dehydrogenase (DLD) (E3). The E1 enzyme is a heterotetramer of 2 alpha and 2 beta subunits. The E1-alpha subunit contains the E1 active site and plays a key role in the function of the PDH complex .Pyruvate dehydrogenase (E1) performs the first two reactions within the pyruvate dehydrogenase complex (PDC): a decarboxylation of substrate 1 (pyruvate) and a reductive acetylation of substrate 2 (lipoic acid).

Note: This product is for in vitro research use only