

## PDHA1/2 (Phospho Ser293/291) rabbit pAb

Catalog No: YP1697

**Reactivity:** Human; Mouse; Rat

**Applications:** WB

Target: PDHA1/2

**Fields:** >>Glycolysis / Gluconeogenesis;>>Citrate cycle (TCA cycle);>>Pyruvate

metabolism;>>Metabolic pathways;>>Carbon metabolism;>>HIF-1 signaling pathway;>>Glucagon signaling pathway;>>Central carbon metabolism in

cancer;>>Diabetic cardiomyopathy

Gene Name: PDHA1 PHE1A

Protein Name: PDHA1/2 (Phospho-Ser293/291)

P08559

P35486

Human Gene Id: 5160

**Human Swiss Prot** 

No:

Mouse Gene Id: 18597

**Mouse Swiss Prot** 

No:

Rat Swiss Prot No: P26284

Immunogen: Synthesized peptide derived from human PDHA1/2 (Phospho-Ser293/291)

**Specificity:** This antibody detects endogenous levels of PDHA1/2 (Phospho-Ser293/291) at

Human, Mouse, Rat

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500-2000

1/3



**Purification:** The antibody was affinity-purified from rabbit serum by affinity-chromatography

using specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 43kD

**Background :** The pyruvate dehydrogenase (PDH) complex is a nuclear-encoded

mitochondrial multienzyme complex that catalyzes the overall conversion of pyruvate to acetyl-CoA and CO(2), and provides the primary link between glycolysis and the tricarboxylic acid (TCA) cycle. The PDH complex is composed of multiple copies of three enzymatic components: pyruvate dehydrogenase (E1), dihydrolipoamide acetyltransferase (E2) and lipoamide dehydrogenase (E3). The E1 enzyme is a heterotetramer of two alpha and two beta subunits. This gene encodes the E1 alpha 1 subunit containing the E1 active site, and plays a key role in the function of the PDH complex. Mutations in this gene are associated with pyruvate dehydrogenase E1-alpha deficiency and X-linked Leigh syndrome. Alternatively spliced transcript variants encoding different isoforms have been

found for this gene.[provided by RefSeq, Mar 2010],

**Function :** catalytic activity:Pyruvate + [dihydrolipoyllysine-residue acetyltransferase]

lipoyllysine = [dihydrolipoyllysine-residue acetyltransferase] S-

acetyldihydrolipoyllysine + CO(2).,cofactor:Thiamine

pyrophosphate., disease: Defects in PDHA1 are a cause of pyruvate

decarboxylase E1 component deficiency (PDHE1 deficiency) [MIM:312170]. PDHE1 deficiency is the most common enzyme defect in patients with primary lactic acidosis. It is associated with variable clinical phenotypes ranging from neonatal death to prolonged survival complicated by developmental delay,

seizures, ataxia, apnea, and in some cases to an X-linked form of Leigh syndrome (LS) (Leigh encephalomyelopathy).,disease:Defects in PDHA1 are the cause of X-linked Leigh syndrome (LS) [MIM:308930]. LS is an early-onset progressive neurodegenerative disorder with a characteristic neuropathology consisting of

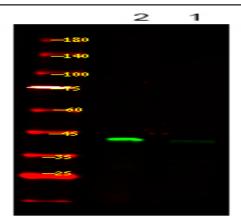
focal, bilateral lesions in o

Subcellular Location:

Mitochondrion matrix.

**Expression:** Ubiquitous.

## **Products Images**



Western Blot analysis of 1 HepG2 cell 2, LPS 100ng/mL 30min treated ,using primary antibody at 1:1000 dilution. Secondary antibody(catalog#:RS23920) was diluted at 1:10000