

## KPYR Polyclonal Antibody

<b>Catalog No :</b>	YN2984
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;ELISA
<b>Target :</b>	KPYR
<b>Fields :</b>	>>Glycolysis / Gluconeogenesis;>>Pyruvate metabolism;>>Metabolic pathways;>>Carbon metabolism;>>Biosynthesis of amino acids;>>Insulin signaling pathway;>>Type II diabetes mellitus;>>Non-alcoholic fatty liver disease;>>Maturity onset diabetes of the young
<b>Gene Name :</b>	PKLR PK1 PKL
<b>Protein Name :</b>	Pyruvate kinase isozymes R/L (EC 2.7.1.40) (Pyruvate kinase 1) (R-type/L-type pyruvate kinase) (Red cell/liver pyruvate kinase)
<b>Human Gene Id :</b>	5313
<b>Human Swiss Prot No :</b>	P30613
<b>Mouse Swiss Prot No :</b>	P53657
<b>Rat Swiss Prot No :</b>	P12928
<b>Immunogen :</b>	Synthesized peptide derived from part region of human protein at AA range: 510-550
<b>Specificity :</b>	KPYR Polyclonal Antibody detects endogenous levels of protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500-2000 ELISA 1:5000-20000
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Concentration :** 1 mg/ml

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

**Observed Band :** 63kD

**Cell Pathway :** Glycolysis / Gluconeogenesis; Purine metabolism; Pyruvate metabolism; Insulin\_Receptor; Type II diabetes mellitus; Maturity onset diabetes of the young;

**Background :** The protein encoded by this gene is a pyruvate kinase that catalyzes the transphosphorylation of phosphoenolpyruvate into pyruvate and ATP, which is the rate-limiting step of glycolysis. Defects in this enzyme, due to gene mutations or genetic variations, are the common cause of chronic hereditary nonspherocytic hemolytic anemia (CNSHA or HNSHA). Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008],

**Function :** catalytic activity: ATP + pyruvate = ADP + phosphoenolpyruvate.; cofactor: Divalent metal cations.; cofactor: Magnesium.; cofactor: Potassium.; disease: Defects in PKLR are a cause of chronic nonspherocytic hemolytic anemia (CNSHA) [MIM:266200]; also called hereditary nonspherocytic hemolytic anemia (HNSHA).; disease: Defects in PKLR are the cause of pyruvate kinase hyperactivity [MIM:102900]; also known as high red cell ATP syndrome. This autosomal dominant phenotype is characterized by increase of red blood cell ATP.; miscellaneous: There are 4 isozymes of pyruvate kinase in mammals: L, R, M1 and M2. L type is major isozyme in the liver, R is found in red cells, M1 is the main form in muscle, heart and brain, and M2 is found in early fetal tissues.; online information: Pyruvate kinase entry, pathway: Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 5/5.; similarity:

**Subcellular Location :** cytosol, extracellular exosome,

**Expression :** Epithelium, Pancreas,

## Products Images