

## Human Recombinant PKLR

<b>CATALOG #:</b>	6373-50	50 µg
<b>ALTERNATE NAMES:</b>	Pyruvate kinase isozyme R/L, PK1, PKL, PKR, PKRL, RPK.	
<b>SOURCE:</b>	E.Coli	
<b>PURITY:</b>	> 90% by SDS - PAGE	
<b>MOL. WEIGHT:</b>	59.2 kDa (549 aa, 47-574 aa + NT His-Tag)	
<b>FORMULATION:</b>	1 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 0.2 M NaCl, 1 mM DTT and 10% glycerol.	

### STORAGE CONDITIONS:

Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

### DESCRIPTION:

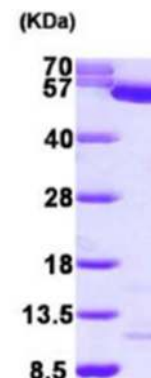
PKLR is a pyruvate kinase which catalyzes the trans phosphorylation of Phosphoenolpyruvate into pyruvate and ATP. That is the rate-limiting step of glycolysis. PKLR gene encodes the L- and R-type isoenzymes through alternate splicing events controlled by different promoters. The L-type isoform can also appear as a tetramer and is upregulated by glucose with implications in maturity-onset diabetes of the young.

### AMINO ACID SEQUENCE:

MGSSHHHHHH SSGLVPRGSH MLTQELGTAF FQQQLPAAM ADTFLEHLCL  
 LDIDSEPVAA RSTSIATIG PASRSVERLK EMIKAGMNIA RLNFSGHSHE YHAESIANVR  
 EAVESFAGSP LSYRPVIAAL DTKGPEIRTG ILQGGPESEV ELVKGSQVLV TVDPAFRTRG  
 NANTVWVDYP NIVRVVPVGG RIYIDDGLIS LVVQKIGPEG LVTQVENGGV LGSRKGVNLP  
 GAQVDLPGLS EQDVRDLRFG VEHGVDIVFA SFVRKASDVA AVRAALGPEG HGIIISKIE  
 NHEGVKRFDE ILEVSDGIMV ARGDLGIEIP AEKVFLAQKM MIGRCNLAGK PVVCATQMLE  
 SMITKPRPTR AETSDVANAV LDGADCIMLS GETAKGNFPV EAVKMQHAIA REAEAAYVHR  
 QLFEELRRAA PLSRDPTTEVT AIGAVEAAFK CCAAIIIVLT TTGRSAQLLS RYRPRAAVIA  
 VTRSAQAARQ VHLCRGVFPL LYREPPEAIW ADDVDRRVQF GIESGKLRGF LRVGDLVIVV  
 TGWRPGSGYT NIMRVLSIS

### BIOLOGICAL ACTIVITY:

Specific activity: > 0.1 unit/mg. One unit will form 1.0 µmol of phosphoenolpyruvate to pyruvate per minute at pH 7.5 at 37°C.



15% SDS-PAGE (3µg)

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### RELATED PRODUCTS:

- Pyruvate Kinase Activity Assay kit (Cat. No. K709-100)
- Human recombinant PKM2 (Cat. No. 6372-100)
- GSK-3b Blocking peptide (Cat. No. 3994BP-50)
- PEPCK-C Blocking peptide (Cat. No. 3949BP-50)

**FOR RESEARCH USE ONLY! Not to be used in humans.**