

## 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:

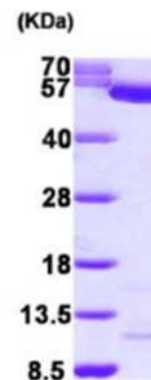
PKLR is a pyruvate kinase which catalyzes the trans phosphorylation of Phosphoenolpyruvate into pyruvate and ATP. That is the rate-limiting step of glycolysis. PKLR gene encodes the L- and R-type isoenzymes through alternate splicing events controlled by different promoters. The L-type isoform can also 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  
LDIDSEPVA RSTSIATIG PASRSVERLK EMIKAGMNIA RLNFSGHSHE YHAESIANVR  
EAVESFAGSP LSYRPVAIAL DTKGPEIRTG ILQGGPESEV ELVKGSQVLV TVDPAFRTRG  
NANTVWVDYP NIVRVVPVGG RIYIDDGLIS LVVQKIGPEG LVTQVENGGV LGSRKGVNLP  
GAQVDLPGLS EQDVRDLRFG VEHGVDIVFA SFVRKASDVA AVRAALGPEG HGKIISKIE  
NHEGVKRFDE ILEVSDGIMV ARGDLGIEIP AEKVFLAQKM MIGRCNLAGK PVVCATQMLE  
SMITKPRPTR AETSDVANAV LDGADCIMLS GETAKGNFPV EAVKMQHAIA REAEAAYVHR  
QLFEELRRAA PLSRDPTTEV AIGAVEAAFK CCAAIIIVLT TTGRSAQLLS RYRPRAAVIA  
VTRSAQAARQ VHLCRGVFPL LYREPPEAIW ADDVDRRVQF GIESGKLRGF LRVGDLVIVV  
TGWPRGSGYT 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.**