

## Product datasheet for **RC212337**

### Pyruvate Kinase (PKLR) (NM\_181871) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Pyruvate Kinase (PKLR) (NM_181871) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pyruvate Kinase
Synonyms:	PK1; PKL; PKRL; RPK
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC212337 representing NM\_181871  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAAGGGCCAGCGGGTATCTGCGGCGGGCCAGTGTGGCCAACTGACCCAGGAGCTGGGCACTGCCT  
 TCTTCCAGCAGCAGCAGCTGCCAGCTGCTATGGCAGACACCTTCCCTGGAACACCTCTGCCTACTGGACAT  
 TGACTCCGAGCCCGTGGCTGCTCGCAGTACCAGCATCATTGCCACCATCGGGCCAGCATCTCGTCCGTG  
 GAGCGCCTCAAGGAGATGATCAAGGCCGGGATGAACATTGCGCGACTCAACTTCTCCACGGCTCCCACG  
 AGTACCATGCTGAGTCCATCGCCAACGTCGGGAGGCGGTGGAGAGCTTTGCAGGTTCCCCTACTCAGCTA  
 CCGGCCCGTGGCCATCGCCCTGGACACCAAGGGACCGGAGATCCGCACTGGGATCCTGCAGGGGGTCCA  
 GAGTCGGAAGTGGAGCTGGTGAAGGGCTCCAGGTGCTGGTACTGTGGACCCCGCTTCCGGACCGGG  
 GGAACCGGAACACCGTGTGGGTGGACTACCCCAATATTGTCCGGTCTGCCGGTGGGGGGCCGCATCTA  
 CATTGACGACGGGCTCATCTCCCTAGTGGTCCAGAAAATCGGCCAGAGGGACTGGTACCCAAGTGGAG  
 AACGGCGCGCTCCTGGGAGCCGGAAGGGCGTGAACCTGCCAGGGGCCAGGTGGACTTGCCCGGGCTGT  
 CCGAGCAGGACGTCGAGACCTGCGCTTCGGGGTGGAGCATGGGGTGGACATCGTCTTGCCCTCTTTGT  
 GCGGAAAGCCAGCGACGTGGCTGCCGTCAGGGTCTCTGGTCCGGAAGGACACGGCATCAAGATCATC  
 AGCAAAATTGAGAACCACGAAGGCGTGAAGAGGTTTGTGAAATCCTGGAGGTGAGCGACGGCATCATGG  
 TGGCACGGGGGGACCTAGGCATCGAGATCCCAGCAGAGAAGGTTTTCTGGCTCAGAAGATGATGATTGG  
 GCGCTGCAACTTGGCGGGCAAGCCTGTTGTCTGTGCCACACAGATGCTGGAGAGCATGATTACCAAGCCC  
 CGGCCAACGAGGGCAGAGACAAGCGATGTCGCCAATGCTGTGCTGGATGGGGTACTGCATCATGCTGT  
 CAGGGGAGACTGCCAAGGGCAACTTCCCTGTGGAAGCGTGAAGATGCAGCATGCGATTGCCCGGGAGGC  
 AGAGGCCGAGTGTACCACCGGAGCTGTTTGGAGAGTACGTCGGGCAGCGCCACTAAGCCGATGCC  
 ACTGAGGTCAACGCCATTGGTGTGTGGAGGCTGCCTTCAAGTGTGTGTGCTGCCATCATTGTGTGA  
 CCACAAGTGGCCGCTCAGCCAGCTTCTGTCTCGGTACCGACCTCGGCAGCAGTCATTGCTGTACCCG  
 CTCTGCCAGGCTGCCCGCCAGTCCACTATGCCAGGAGTCTTCCCCTTGCTTACCCTGAACCTCCA  
 GAAGCCATCTGGGAGATGATGTAGATCGCCGGTGAATTTGGCATTGAAAGTGGAAAGCTCCGTGGCT  
 TCCTCCGTGTTGGAGACCTGGTATTGTGGTACAGGCTGGCGACCTGGTCCGGCTACACCAACATCAT  
 GCGGGTGCTAAGCATATCC

**ACGCGT**ACGCGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC212337 representing NM\_181871  
 Red=Cloning site Green=Tags(s)

MEGPAGYLRRASVAQLTQELGTAFQQQQLPAAMADTFLEHLCLLDIDSEPVAARSTSIATIGPASRSV  
 ERLKEMIKAGMNIARLNFSHGSHEYHAESIANYREAVESFAGSPLSYRPVAIALDTKGPEIRTGILQGGP  
 ESEVELVKGSQVLVTPAFRTRGNANTVWVDYPNIVRVVPGGRIYIDDGLISLVVQKIGPEGLVTQVE  
 NGGVLGSRKGVNLPQAQVDLPGLSEQDVRDLRFVGEHGVDFVAFVVRKASDVAAVRAALGPEGHGKII  
 SKIENHEGVKRFDEILEVSDGIMVARGDLGIEIPAQKMMIGRCNLAGKPVVCAATQMLESMITKP  
 RPTRAETSDVANAVLDGADCIMLSGETAKGNFPVEAVKMQHAIAREAEAAVYHRQLFEELRRAAPLSRDP  
 TEVTAIGAVEAAFKCAAIIIVLTTTGRSAQLLSRYRPRAAVIAVTRSAQARQVHLCRGVFPLL YREPP  
 EAIWADDVDRRVQFGIESGKLRGFLRVGDLVIVVTGWRPGSGYTNIMRVL SIS

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8066\\_d10.zip](https://cdn.origene.com/chromatograms/mk8066_d10.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_181871

**ORF Size:** 1629 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

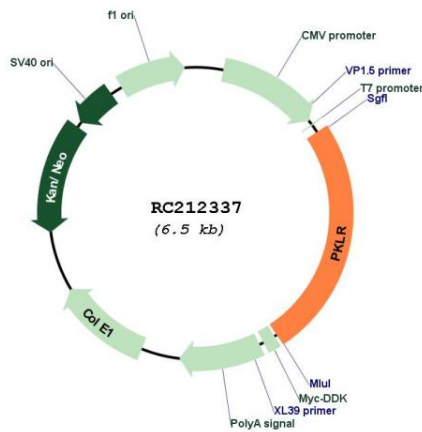
**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
  5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_181871.4](#)

RefSeq Size:	2433 bp
RefSeq ORF:	1632 bp
Locus ID:	5313
UniProt ID:	<a href="#">P30613</a>
Cytogenetics:	1q22
Protein Families:	Druggable Genome
Protein Pathways:	Glycolysis / Gluconeogenesis, Insulin signaling pathway, Maturity onset diabetes of the young, Metabolic pathways, Purine metabolism, Pyruvate metabolism, Type II diabetes mellitus
MW:	58.3 kDa
Gene Summary:	The protein encoded by this gene is a pyruvate kinase that catalyzes the transphosphorylation of phosphenolpyruvate 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]

### Product images:



Circular map for RC212337