

Product datasheet for **SC313931**

Pyruvate Kinase (PKLR) (NM_181871) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Pyruvate Kinase (PKLR) (NM_181871) Human Untagged Clone
Tag: Tag Free
Symbol: PKLR
Synonyms: PK1; PKL; PKRL; RPK
Vector: pCMV6 series
Fully Sequenced ORF: >NCBI ORF sequence for NM_181871, the custom clone sequence may differ by one or more nucleotides

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ATGGAAGGGCCAGCGGGTATCTGCGGGGCCAGTGTGGCCAACTGACCCAGGAGCTG
GGCACTGCCTTCTCCAGCAGCAGCAGCTGCCAGCTGCTATGGCAGACACCTTCTCGAA
CACCTCTGCTACTGGACATTGACTCCGAGCCCGTGGCTGCTCGCAGTACCAGCATCATT
GCCACCATCGGGCCAGCATCTCGCTCCGTGGAGCGCCTCAAGGAGATGATCAAGGCCGGG
ATGAACATTGCGCGACTCAACTTCTCCCACGGCTCCCACGAGTACCATGCTGAGTCCATC
GCCAACGTCCGGGAGGCGGTGGAGAGCTTTGCAGGTTCCCACTCAGCTACCGGCCCGTG
GCCATCGCCCTGGACACCAAGGGACCGGAGATCCGCACTGGGATCCTGCAGGGGGTCCA
GAGTCGGAAGTGGAGCTGGTGAAGGGCTCCCAGGTGCTGGTACTGTGGACCCCGCTTC
CGGACGCGGGGGAACGCGAACACCGTGTGGGTGGACTACCCCAATATTGTCCGGTCTGTG
CCGGTGGGGGGCCGCATCTACATTGACGACGGGCTCATCTCCCTAGTGGTCCAGAAAATC
GGCCCAGAGGGACTGGTGACCCAAGTGGAGAACGGCGGGCTCCTGGGCAGCCGGAAGGGC
GTGAACTTGCCAGGGGCCAGGTGGACTTGCCCGGGCTGTCCGAGCAGGACGTCCGAGAC
CTGCGCTTCGGGGTGGAGCATGGGGTGGACATCGTCTTTGCCTCCTTTGTGCGGAAAGCC
AGCGACGTGGCTGCCGTGAGGGCTGCTCTGGGTCGGAAGGACACGGCATCAAGATCATC
AGCAAAATTGAGAACCACGAAGGCGTGAAGAGTTTATGAAATCCTGGAGGTGAGCGAC
GGCATCATGGTGGCACGGGGGACCTAGGCATCGAGATCCAGCAGAGAAGGTTTTCTTG
GCTCAGAAGATGATGATTGGGCGCTGCAACTTGGCGGGCAAGCCTGTTGTCTGTGCCACA
CAGATGCTGGAGAGCATGATTACCAAGCCCGGCAACGAGGGCAGAGACAAGCGATGTC
GCCAATGCTGTGCTGGATGGGGCTGACTGCATCATGCTGTGAGGGGAGACTGCCAAGGGC
AACTTCCCTGTGGAAGCGGTGAAGATGCAGCATGCGATTGCCCGGAGGCAGAGGCCGCA
GTGTACCACCGGCAGCTGTTTGGAGAGCTACGTCGGGCAGCGCCACTAAGCCGTGATCCC
ACTGAGGTCAACCCATTGGTGTGTGGAGGCTGCCTTCAAGTGTGTGCTGCTGCCATC
ATTGTGCTGACCACAACCTGGCCGCTCAGCCAGCTTCTGTCTCGTACCGACCTCGGGCA
GCAGTCATTGCTGTACCCGCTCTGCCAGGCTGCCCGCAGGTCCACTTATGCCGAGGA
GTCTTCCCTTGCTTTACCGTGAACCTCCAGAAGCCATCTGGGCAGATGATGTAGATCGC
CGGGTGAATTTGGCATTGAAAGTGAAAGCTCCGTGGCTTCTCCGTGTTGGAGACCTG
GTGATTGTGGTGACAGGCTGGCGACCTGGCTCCGGCTACACCAACATCATGCGGGTGCTA
AGCATATCC
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Restriction Sites:	Please inquire
ACCN:	NM_181871
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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:	<u>NM_181871.1</u> , <u>NP_870986.1</u>
RefSeq Size:	2433 bp
RefSeq ORF:	1632 bp
Locus ID:	5313
UniProt ID:	<u>P30613</u>
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
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (2) uses an alternate 5' exon, as compared to variant 1. The resulting isoform (2) has a distinct and shorter N-terminus, as compared to isoform 1. Isoform 2 is also known as type L. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The extent of this transcript is supported by transcript alignments.</p>