

Product datasheet for RC212337L2

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

Pyruvate Kinase (PKLR) (NM_181871) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Pyruvate Kinase (PKLR) (NM 181871) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Pyruvate Kinase

Synonyms: PK1; PKL; PKRL; RPK

Mammalian Cell None

Selection:

Vector: pLenti-C-mGFP (PS100071)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC212337).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





 $[\]ensuremath{^*}$ The last codon before the Stop codon of the ORF.

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 customport@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. <u>More info</u>

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:

Cytogenetics:

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: <u>NM 181871.1</u>

 RefSeq Size:
 2433 bp

 RefSeq ORF:
 1632 bp

 Locus ID:
 5313

 UniProt ID:
 P30613

Protein Families: Druggable Genome

1q22

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

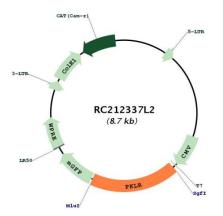
Gene Summary: The protein encoded by this gene is a pyruvate kinase that catalyzes the

transphosphorylation of phohsphoenolpyruvate 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

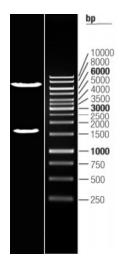
gene. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC212337L2



Double digestion of RC212337L2 using Sgfl and Mlul $\,$