

Product datasheet for RC206455L2

OriGene Technologies, Inc.

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Pyruvate Kinase (PKLR) (NM_000298) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Pyruvate Kinase (PKLR) (NM_000298) 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(RC206455).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_000298

ORF Size: 1722 bp



Pyruvate Kinase (PKLR) (NM_000298) Human Tagged Lenti ORF Clone - RC206455L2

OTI Disclaimer: 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: <u>NM 000298.4</u>

 RefSeq Size:
 3053 bp

 RefSeq ORF:
 1725 bp

 Locus ID:
 5313

 UniProt ID:
 P30613

Cytogenetics: 1q22

Domains: PK

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: 61.8 kDa

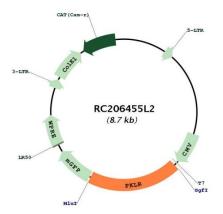
Gene Summary: The protein encoded by this gene is a pyruvate kinase that catalyzes the

transphosphorylation of phohsphoenolpyruvate into pyruvate and ATP, which is the ratelimiting 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

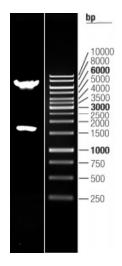
gene. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC206455L2



Double digestion of RC206455L2 using Sgfl and Mlul $\,$