

### Product datasheet for RC204758L4

# PCK1 (NM\_002591) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** PCK1 (NM\_002591) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: PCK1

Synonyms: PCKDC; PEPCK-C; PEPCK1; PEPCKC

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

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

**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC204758).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

ACCN: NM\_002591

ORF Size: 1866 bp



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#### PCK1 (NM\_002591) Human Tagged Lenti ORF Clone - RC204758L4

**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.

20q13.31

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 002591.2

 RefSeq Size:
 2692 bp

 RefSeq ORF:
 1869 bp

 Locus ID:
 5105

 UniProt ID:
 P35558

Domains: PEPCK

Cytogenetics:

**Protein Families:** Druggable Genome

**Protein Pathways:** Adipocytokine signaling pathway, Citrate cycle (TCA cycle), Glycolysis / Gluconeogenesis,

Insulin signaling pathway, Metabolic pathways, PPAR signaling pathway, Pyruvate metabolism

**MW:** 69.2 kDa

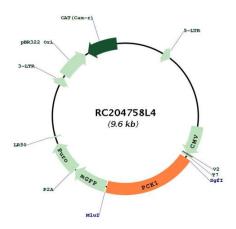
**Gene Summary:** This gene is a main control point for the regulation of gluconeogenesis. The cytosolic enzyme

encoded by this gene, along with GTP, catalyzes the formation of phosphoenolpyruvate from oxaloacetate, with the release of carbon dioxide and GDP. The expression of this gene can be regulated by insulin, glucocorticoids, glucagon, cAMP, and diet. Defects in this gene are a cause of cytosolic phosphoenolpyruvate carboxykinase deficiency. A mitochondrial isozyme

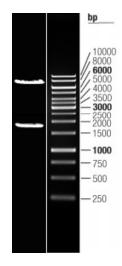
of the encoded protein also has been characterized. [provided by RefSeq, Jul 2008]



## **Product images:**



Circular map for RC204758L4



Double digestion of RC204758L4 using Sgfl and Mlul  $\,$