

## **Product datasheet for RC206043L2**

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OriGene Technologies, Inc.

### PFKFB3 (NM\_004566) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: PFKFB3 (NM\_004566) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: PFKFB3

Synonyms: iPFK-2; IPFK2; PFK2

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(RC206043).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM\_004566

ORF Size: 1560 bp





#### PFKFB3 (NM\_004566) Human Tagged Lenti ORF Clone - RC206043L2

**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 004566.2</u>

 RefSeq Size:
 4553 bp

 RefSeq ORF:
 1563 bp

 Locus ID:
 5209

 UniProt ID:
 Q16875

**Cytogenetics:** 10p15.1

**Domains:** PGAM, 6PF2K

**Protein Families:** Druggable Genome

**Protein Pathways:** Fructose and mannose metabolism

**MW:** 59.6 kDa

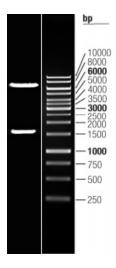
**Gene Summary:** The protein encoded by this gene belongs to a family of bifunctional proteins that are

involved in both the synthesis and degradation of fructose-2,6-bisphosphate, a regulatory molecule that controls glycolysis in eukaryotes. The encoded protein has a 6-phosphofructo-2-kinase activity that catalyzes the synthesis of fructose-2,6-bisphosphate (F2,6BP), and a fructose-2,6-biphosphatase activity that catalyzes the degradation of F2,6BP. This protein is required for cell cycle progression and prevention of apoptosis. It functions as a regulator of cyclin-dependent kinase 1, linking glucose metabolism to cell proliferation and survival in tumor cells. Several alternatively spliced transcript variants encoding different isoforms have

been found for this gene. [provided by RefSeq, Apr 2016]



# **Product images:**



Double digestion of RC206043L2 using Sgfl and Mlul  $\,$