

## **Product datasheet for RC204185L3**

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OriGene Technologies, Inc.

## PHKA2 (NM\_000292) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: PHKA2 (NM\_000292) Human Tagged Lenti ORF Clone

Tag: Myc-DDK
Symbol: PHKA2

Synonyms: GSD9A; PHK; PYK; PYKL; XLG; XLG2

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

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

**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC204185).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





st The last codon before the Stop codon of the ORF.

**ACCN:** NM\_000292

ORF Size: 3705 bp



## PHKA2 (NM\_000292) Human Tagged Lenti ORF Clone - RC204185L3

**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 000292.1</u>

 RefSeq Size:
 5325 bp

 RefSeq ORF:
 3708 bp

 Locus ID:
 5256

 UniProt ID:
 P46019

Cytogenetics: Xp22.13

**Protein Families:** Druggable Genome

**Protein Pathways:** Calcium signaling pathway, Insulin signaling pathway

**MW:** 138.4 kDa

**Gene Summary:** Phosphorylase kinase is a polymer of 16 subunits, four each of alpha, beta, gamma and delta.

The alpha subunit includes the skeletal muscle and hepatic isoforms, and the hepatic isoform is encoded by this gene. The beta subunit is the same in both the muscle and hepatic isoforms, and encoded by one gene. The gamma subunit also includes the skeletal muscle and hepatic isoforms, which are encoded by two different genes. The delta subunit is a calmodulin and can be encoded by three different genes. The gamma subunits contain the active site of the enzyme, whereas the alpha and beta subunits have regulatory functions controlled by phosphorylation. The delta subunit mediates the dependence of the enzyme on calcium concentration. Mutations in this gene cause glycogen storage disease type 9A, also known as X-linked liver glycogenosis. Alternatively spliced transcript variants have been

reported, but the full-length nature of these variants has not been determined.[provided by

RefSeq, Feb 2010]