

Product datasheet for RC204185

PHKA2 (NM_000292) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHKA2 (NM_000292) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PHKA2
Synonyms:	GSD9A; PHK; PYK; PYKL; XLG; XLG2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204185 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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Protein Sequence: >RC204185 protein sequence
 Red=Cloning site Green=Tags(s)

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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6680_b09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

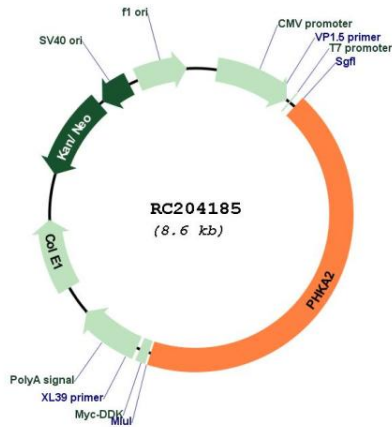


ACCN: NM_000292

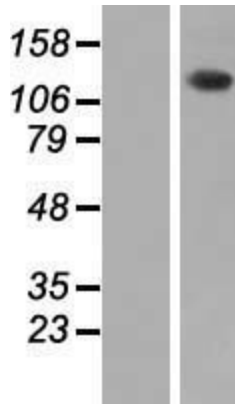
ORF Size: 3705 bp

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:	<ol style="list-style-type: none">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:	NM_000292.3
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]

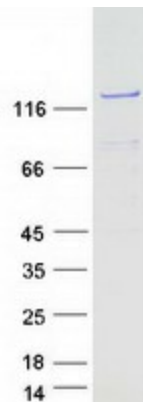
Product images:



Circular map for RC204185



Western blot validation of overexpression lysate (Cat# [LY424811]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204185 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PHKA2 protein (Cat# [TP304185]). The protein was produced from HEK293T cells transfected with PHKA2 cDNA clone (Cat# RC204185) using MegaTran 2.0 (Cat# [TT210002]).