

Product datasheet for RC229959

PHKG2 (NM_001172432) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHKG2 (NM_001172432) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PHKG2
Synonyms:	GSD9C
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC229959 representing NM_001172432 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACGCTGGACGTGGGGCCGGAGGATGAGCTGCCGACTGGGCCCGCCAAAGAGTTTTACCAGAAGT
ACGACCCTAAGGACGTCATCGGCAGAGGAGTGAGCTCTGTGGTCCGCCGTTGTGTTTCATCGAGCTACTGG
CCACGAGTTTGGGTGAAGATTATGGAAGTGACAGCTGAGCGGCTGAGTCCTGAGCAGCTGGAGGAGGTG
CGGAAGCCACACGGCGAGAGACACACATCCTTCGCCAGGTGCGCGGCCACCCCCACATCATCACCTCA
TCGATTCTACGAGTCTTCTAGCTTCATGTTCTGGTGTGGACCTGATGCGGAAGGGAGAGCTGTTTGA
CTATCTCACAGAGAAGGTGGCCCTCTCTGAAAAGGAAACCAGGTCCATCATGCGGTCTCTGCTGGAAGCA
GTGAGCTTTCTCCATGCCAACAACATTGTGCATCGAGATCTGAAGCCCGAGAATATTCTCTAGATGACA
ATATGCAGATCCGACTTTTCAGATTTTCGGTTCTCTGCCACTTGGAACTGGCGAGAAGCTTCGAGAGTT
GTGTGGGACCCAGGGTATCTAGCGCCAGAGATCCTTAAATGCTCCATGGATGAAACCCACCCAGGCTAT
GGCAAGGAGGTCGACCTCTGGCCTGTGGGTGATCTTGTTCACACTCCTGGCTGGCTCGCCACCTTCT
GGCACCAGGCGGAGATCCTGATGTTACGCATGATCATGGAGGGCCAGTACCAGTTCAGTTCACCCGAGTG
GGATGACCGTTCACGACTGTCAAAGACCTGATCTCCAGGCTGCTGCAGGTGGATCCTGAGGCACGCTG
ACAGCTGAGCAGGCCCTACAGCACCCCTCTTTGAGCGTTGTGAAGGCAGCCAACCTGGAACCTCACCC
CCGCCAGCGGTTCCGGGTGGCAGTGTGGACAGTGTGGCTGCTGGACGAGTGGCCCTAAGCACCCATCG
TGTACGGCCACTGACCAAGAATGCACTGTTGAGGGACCCTTATGCGCTGCGGTGAGTGGCGCACCTCATC
GACAACTGTGCCTTCGGCTCTACGGGCACTGGATAAGGAAGCAGTGGATTGAAAGCTGATGGCTGTG
TA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC229959 representing NM_001172432
Red=Cloning site Green=Tags(s)

MTLDVGPEDLPDWAAAKEFYQKYDPKDVIGRGVSSVVRRCVHRATGHEFAVKIMEVTAERLSPEQLEEV
 REATRRETHILRQVAGHPHIITLIDSYESSFMFLVFDLMRKGELFDYLTEKVALSEKETRSIMRSLLEA
 VSFLHANNIVHRDLKPENILLDDNMQIRLSDFGF SCHLEPGEKLRCLGTPGYLAPEILKCSMDETHPGY
 GKEVDLWACGVILFTLLAGSPPFWHRRQILMLRMIMEGQYQFSSPEWDDRSSTVKDLISRLLQVDPEARL
 TAEQALQHPFFERCEGSQPWNLTQRQFRVAVWTVLAAGRVALSTHRVRPLTKNALLRDPYALRSVRHLI
 DNCAFRLYGHWIRKQWIGKLMACV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8055_e04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001172432

ORF Size: 1122 bp

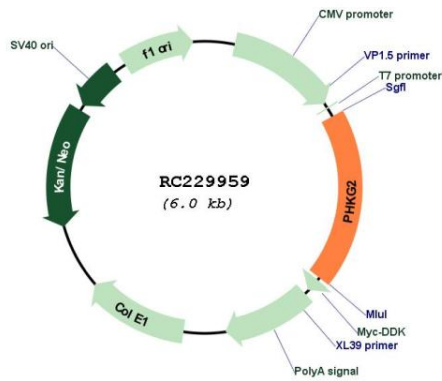
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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.

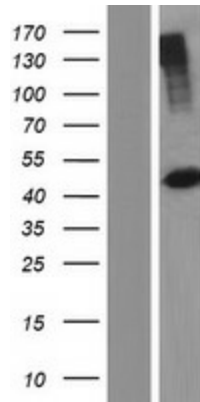
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

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:	<u>NM_001172432.1, NP_001165903.1</u>
RefSeq ORF:	1125 bp
Locus ID:	5261
UniProt ID:	<u>P15735</u>
Cytogenetics:	16p11.2
Protein Families:	Druggable Genome, Protein Kinase
Protein Pathways:	Calcium signaling pathway, Insulin signaling pathway
MW:	43.6 kDa
Gene Summary:	<p>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, encoded by two different genes. 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, and the hepatic isoform is encoded by this gene. 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 9C, also known as autosomal liver glycogenosis. Alternatively spliced transcript variants encoding different isoforms have been identified in this gene.[provided by RefSeq, Feb 2010]</p>

Product images:



Circular map for RC229959



Western blot validation of overexpression lysate (Cat# [LY432959]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229959 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).