

Product datasheet for RC208591

PHKG1 (NM_006213) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHKG1 (NM_006213) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PHKG1
Synonyms:	PHKG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208591 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACCCGGGACGAGGCACTGCCGGACTCTCATTCTGCACAGGACTTCTATGAGAATTATGAGCCCAAAG
AGATCCTGGGCAGGGGCGTTAGCAGTGTGGTCAGGCGATGCATCCACAAGCCACGAGCCAGGAGTACGC
CGTGAAGGTCATCGAGCTCACCGGTGGAGGCGACTTCAGCCCGGAGGAGTGCAGGAGCTGCGAGAAGCC
ACGCTGAAGGAGGTGGACATCCTGCGCAAGGTCTCAGGGCACCCCAACATCATAACAGCTGAAGGACACTT
ATGAGACCAACACTTTTCTTCTTGGTGTGGTACCTGATGAAGAGAGGGGAGCTCTTTGACTACCTCAC
TGAGAAGGTACCTTGTGAGTGAAGAAACCAGAAAGATCATGCGAGCTCTGCTGGAGGTGATCTGCACC
TTGCACAAACTCAACATCGTGCACCGGGACCTGAAGCCCGAGAACATTCTCTTGGATGACAAATGAACA
TCAAGCTCACAGACTTTGGCTTTTCTGCCAGCTGGAGCCGGGAGAGAGGCTGCGAGAGGTCTGCGGGAC
CCCCAGTTACCTGGCCCTGAGATTATCGAGTGTCCATGAATGAGGACCACCCGGGCTACGGGAAAGAG
GTGGACATGTGGAGCACTGGCGTCATCATGTACACGCTGCTGGCCGGCTCCCCGCCCTTCTGGCACCGGA
AGCAGATGCTGATGCTGAGGATGATCATGAGCGGCAACTACCAGTTTGGCTCGCCGAGTGGGATGATTA
CTCGGACACCGTGAAGGACCTGGTCTCCCGATTCTGGTGGTGAACCCAGAACCGCTACACAGCGGAA
GAGGCCTTGGCACACCCCTTCTCCAGCAGTACTTGGTGGAGGAAGTCCGGCACTTCAGCCCGGGGGA
AGTTCAAGGTGATCGCTCTGACCGTGTGGCTTCAAGTGGGATCTACTACAGTACCGCCGGGTGAAGCC
TGTGACCCGGGAGATCGTCATCCGAGACCCCTATGCCCTCCGGCCTCTGCGCCGGCTCATCGACGCTAC
GCTTTCCGAATCTATGGCACTGGGTGAAGAAGGGGAGCAGCAGAGAACCAGGAGCCCTTTTCGAGAACA
CACCCAAGGCCGTGCTCCTCCTCGCCGAGGAGGACTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208591 protein sequence
Red=Cloning site Green=Tags(s)

MTRDEALPDSHSAQDFYENYEPKEILGRGVSSVVRRCIHKPTSQEYAVKVIDVTGGGSFSPEEVRELREA
 TLKEVDILRKVSGHPNIIQLKDTYETNTFFFLVFDLMKRGELFDYLTEKVTLSEKETRKIMRALLEVICT
 LHKLNIVHRDLKPENILLDDNMNIKL TDFGFSQLEPGERLREVCGTPSYLAPEIIECSMNEDHPGYGKE
 VDMWSTGVIMYTL LAGSPPFWHRKQMLMLRMIMSGNYQFGSPEWDDYSDTVKDLVSRFLVVQPQNRYSAE
 EALAHPPFQQYLVEEVRHFSRPGKFKVIALTLASVRIYYQYRRVKPVTREIVIRDPYALRPLRLRIDAY
 AFRIYGHWWKKGQQNRAALFENTPKAVLLSLAEEDY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6070_e05.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_006213

ORF Size: 1161 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:

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_006213.5](#)

RefSeq Size: 2130 bp

RefSeq ORF: 1164 bp

Locus ID: 5260

UniProt ID: [Q16816](#)

Cytogenetics: 7p11.2

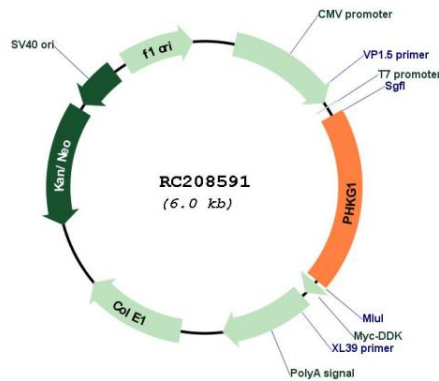
Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Calcium signaling pathway, Insulin signaling pathway

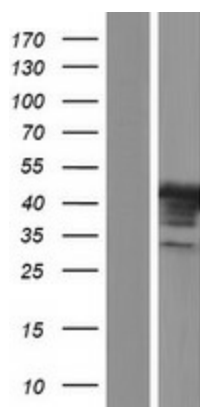
MW: 45 kDa

Gene Summary: This gene is a member of the Ser/Thr protein kinase family and encodes a protein with one protein kinase domain and two calmodulin-binding domains. This protein is the catalytic member of a 16 subunit protein kinase complex which contains equimolar ratios of 4 subunit types. The complex is a crucial glycogenolytic regulatory enzyme. This gene has two pseudogenes at chromosome 7q11.21 and one at chromosome 11p11.12. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2012]

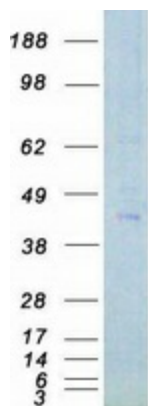
Product images:



Circular map for RC208591



Western blot validation of overexpression lysate (Cat# [LY401872]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208591 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PHKG1 protein (Cat# [TP308591]). The protein was produced from HEK293T cells transfected with PHKG1 cDNA clone (Cat# RC208591) using MegaTran 2.0 (Cat# [TT210002]).