

## Product datasheet for **RG207611**

### Phosphorylase B (PHKB) (NM\_001031835) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Phosphorylase B (PHKB) (NM_001031835) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PHKB
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG207611 representing NM_001031835 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCTGCTCACCTGATGCAGTCGTCTCTCCGCTTCCGCTTTCTTAAGGTCTGGCTCAGTTTATGAAC  
CTCTTAAAAGCATTAACTTCCAAGACCTGATAATGAACTCTCTGGGATAAGTTGGACCATTATTACAG  
AATTGTCAAGTCAACATTGCTGCTGTATCAAAGTCCAACCTACCGGTCTCTTCCCACTAAAACATGCGGT  
GGTGACCAGAAGGCCAAGATCCAGGACAGCCTATACTGCGTGCTGGGGCCTGGGCTTTGGCTCTTGAT  
ACAGGCCGAATTGATGACGACAAGGGAAGGACCCATGAGCTGGAGCACTCAGCTATAAAATGCATGAGAGG  
AATTCTCTACTGCTATATGCGTCAAGCCGATAAAGTCCAGCAGTTTAAGCAGGATCCAGCCCAACAACA  
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AGATAAATGCAGTGTCACTTTATCTCCTTTACCTTGTTGAAATGATTTCCCTCAGGACTCCAGATTATCTA  
CAACACTGATGAGGTCTCTTTTATTCAAAACCTTGTATTTGTGTGAAAGAGTTTACCCTGTGCCTGAC  
TTTGGTGTCTGGGAAAGAGGAAGCAAATAATAATGGCAGCACAGAGCTACATTCGAGCTCGGTTGGTT  
TAGCAAAGCAGCTCTAGAAGCAATTAATGGATTCAACCTTTTTGGCAACCAGGGCTGTTCTGTGTCAGT  
TATATTTGTGGATCTCGATGCTCACAATCGCAACAGGCAAACCTTTGTGCTCGCTGTACCCAGAGAATCA  
AGATCACATAATACAGATGCTGCCCTGCTCCCCTGCATCAGTTATCCTGCATTTGCCCTGGATGATGAAG  
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GAGAGATGGGTATAGAACATCATTGGAAGATCCCAACAGATGCTACTACAAGCCAGCTGAAATTAAGCTA  
TTTGATGGCATTGAATGTGAATTTCCCATATTTTTCTTTATATGATGATTGATGGAGTTTTTAGAGGCA  
ATCCTAAGCAAGTACAGGAATATCAGGATCTTTTGACTCCAGTACTTCATCATACCACAGAAGGATATCC  
TGTTGTACCAAAGTACTATTATGTGCCAGCTGACTTTGTAGAATATGAAAAAATAACCTTGGTAGTCAA  
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GGATCAACGTAACGTGAGCATGAGGTTTTCCAATCAGGGCCCACTGGAAAATGACTTGGTAGTTCTATGTG  
GCACCTTATAGCAGAAAGCCAAAGACTTCAAGTTTTCTGAACACATATGGTATTCAAACCTCAAACCTCCTC  
AACAAAGTAGAACCCATTAGATATGGCCTCAGCAGGAGCTTGTGAAAGCTTATTTGCAGCTGGGTATCAA



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TGAAAAGTTAGGACTCTCTGGAAGGCCAGACAGGCCATTGGCTGCCTCGGGACATCAAAGATTTATCGC  
 ATTCTAGGAAAGACTGTGGTTTGTACCCGATTATTTTCGACCTAAGTGATTTCTACATGTCTCAGGATG  
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 TCTATGACCGAGTGTGGCAGATTCTGGAGCGCACGCCAATGGGATCATTGTTGCTGGGAAGCATTGTC  
 TCAGCAACCAACCCTGTGAGATGACCATGTATGAGATGAATTTCTCTCTCCTTGTGAAGACAGCTTG  
 GGAAATATTGACCAGCCACAGTACAGACAGATCGTTGTAGAGTACTTATGGTTGTATCCATTGTACTGG  
 AAAGAAACCCCGAGCTAGAATTTCAAGACAAAGTAGATCTAGACAGACTGGTCAAAGAAGCATTTAATGA  
 ATTTCAAAAAGATCAGAGTCGGCTAAAGGAAATGAAAAACAAGATGACATGACTTCTTTTACAACACT  
 CCTCCCCTGGGAAAAAGAGGAACATGCAGCTATTTGACAAAGCGGTGATGAATCTGCTGCTGGAAGGAG  
 AAGTCAAGCCAAACAATGATGACCCGTGCTGATTAGC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG207611 representing NM\_001031835  
 Red=Cloning site Green=Tags(s)

MACSPDAVVPSSAFLRSGSVYEPLKSNLPRPDNETLWDKLDHYRIVKSTLLLYQSPTTGLFPTKTCG  
 GDQKAKIQDSL YCAAGAWALALAYRRIDDDKGRTHELEHSAIKCMRGILYCYMRQADKVQQFKQDPRPTT  
 CLHSVFNVHTGDELLSYEEYGHQINAVSLYLLYL VEMISSGLQIIYNTDEVSFIQNLVFCVERVYRVPD  
 FGVWERSKYNNGSTELHSSSVGLAKAALEAINGFNLFGNQCSWSVIFVDLDAHNRNRQTLCSLLPRES  
 RSHNTDAALLPCISYPAFALDDEVLF SQTLDKVVRKLGKYGFKRFLRDGYRTSLEDPNRCYYKPAEIKL  
 FDGIECEFPFIFFLYMMIDGVFRGNPKQVQEYQDLLTPVLHHTTEGYVVPKYYYYPADFVEYEKNNPGSQ  
 KRFPNSNCRDGLFLWGQALYIIAKLLADELISPDKIDPVQRYVPLKDQRNVSMRF SNQGPLENDLVVHV  
 ALIAESQRLQVFLNTYGIQTQTPQQVEPIQIWPQQELVKAYLQLGINEKLG LSGRPDRPIGCLGTSKIYR  
 ILGKTVCYPIIFDL SDFYMSQDVFL IIDDIKNALQFIKQYWKMHGRPLFLVLIREDNIRSRFNPILDM  
 LAALKKGIIGGVKVHVDRLQTLISGAVVEQLDFLRISDTEELPEFKSFEELPEPKHSHKVRQSSTPSAPE  
 LGQQPDVNISEWKDKPTHEILQKLNDCSCLASQAILLGILLKREGPNFITKEGTVSDHIERYRRAQSQK  
 LWSVVRRAASLLSKVVDSLAPSI TNVLVQGKQVTLGAFGHEEEVISNPLSPRVIQNIYYKCNTHDEREA  
 VIQQELVIHIGWII SNPELFSGMLKIRIGWIIHAMEYELQIRGGDKPALDL YQLSPSEVKQLLLDILQP  
 QQNGRCWLNRRQIDGSLNRTPTGFYDRVWQILERTPNGIIVAGKHL PQQPTLSDMTMYEMNF SLLVEDTL  
 GNIDQPQYRQIVVELLMVVSIVLERNPELEFQDKVDLDRLVKEAFNEFQKQDQSRLEIEKQDDMTSFYNT  
 PPLGKRGTCSYLTKAVMNLLEGEVKNNDPCLIS

TRTRPLE – GFP Tag – V

**Restriction Sites:**

Sgfl-MluI



<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_001031835.1</a></u> , <u><a href="#">NP_001027005.1</a></u>
<b>RefSeq Size:</b>	3821 bp
<b>RefSeq ORF:</b>	3261 bp
<b>Locus ID:</b>	5257
<b>UniProt ID:</b>	<u><a href="#">Q93100</a></u>
<b>Cytogenetics:</b>	16q12.1
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Calcium signaling pathway, Insulin signaling pathway
<b>Gene Summary:</b>	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, encoded by this gene, which is a member of the phosphorylase b kinase regulatory subunit family. The gamma subunit also includes the skeletal muscle and hepatic isoforms, 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 9B, also known as phosphorylase kinase deficiency of liver and muscle. Alternatively spliced transcript variants encoding different isoforms have been identified in this gene. Two pseudogenes have been found on chromosomes 14 and 20, respectively.[provided by RefSeq, Feb 2010]