

Product datasheet for SC118481

PHKA1 (NM_002637) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: PHKA1 (NM_002637) Human Untagged Clone
Tag: Tag Free
Symbol: PHKA1
Synonyms: PHKA
Mammalian Cell Selection: None
Vector: [pCMV6-XL4](#)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_002637 edited
TGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTCAGAATTTTGTAAAT
ACGACTACTATAGGGCCGGCCGGAATTCGGCACCAGGCAGCGGTCGTTGACCTGTTGGC
GGCGGCCGGGCGGAGGCTGTGGCCCGCGCGGTCTCCCGGGTTGAGGGGAGGATGCAG
GAGTCACACGCGGAGGCCGGACTGGACTAAGGGGGCAGGAGCGGCGCCTGGGGCGCTGCG
GCGGGGCTCTAGACCGCGGAAGCCAGTCTAGCGCTGGCGCGTGGTGGGCCCTGAGGC
CGCCGGAGTCCGGAGAGGGACCGAAGGCTCCGGTGGCACCCGGGCTATTTCTCAGAGGAC
AATTAGTAACGTGTCGCCATGAGGAGCCGGAGTAACTCCGGGGTCCGGCTGGACGGCTAC
GCTCGACTGGTGAACAGACCATCCTGTGCCATCAGAATCCAGTGACTGGCTTGCTTCCA
GCCAGCTATGATCAGAAAGATGCTTGGGTCGAGATAATGTGTACAGCATCTGGCTGTG
TGGGGTTTGGGCTGGCCTATCGGAAGAATGCAGACCGGGATGAGGATAAGGCAAAGGCC
TATGAATTGAGCAGAGTGTAGTGAAGCTGATGAGAGGACTACTGCACTGCATGATCAGA
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TTGGATGCTACCTCTGTGTACCTGCTCTTCTTAGCCCAAATGACTGCCTCAGGACTCCAT
ATCATCCACAGCCTAGATGAAGTCAATTCATACAGAACCTTGTGTTTTACATTGAAGCT
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TCAGAGTTGAATGCCAGTTCAGTTGGAATGGCAAAGGCAGCCCTGGAAGCATTAGATGAA
CTGGACTGTTTGGTGTGAAAGGTGGGCCTCAATCAGTTATCCATGTCCTGGCTGATGAA
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GTTGATGCTAGTCTACTCTCAGTGGTTTCTTCCCTGCCTTTGCAGTAGAGGATAGCCAG
TTGGTGGAGCTCACAAAACAGGAAATCATCACCAAGCTTCAGGGTCGTTATGGTTGCTGT
CGCTTTCTACGAGATGGATATAAACTCCTAAAGAGGATCCCAATCGTCTGTAATGAA
CCAGCTGAGCTGAAGCTATTTGAAAACATTGAGTGTGAATGGCCATTGTTCTGGACATAC
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GTTCTCTGACAGGGTCGATGAAGAATATCAGAATCCTCACACTGTGGACCGAGTCCCC



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ATGGGGAAATTGCCTCACATGTGGGGTCAGTCTCTATACATTTTAGGAAGCTTGATGGCA
 GAGGGATTTTAGCCCTGGAGAAATTGATCCCCTGAATCGCAGGTTTTCTACTGTACCG
 AAGCCCGATGTTGTGGTTCAAGTCTCCATTCTAGCTGAAACAGAAAGAAATCAAGACCATT
 TTGAAGGACAAGGGAATTCAGTGGAGACCATTGCTGAGGTATACCCCATCAGAGTACAA
 CCAGCTCGTATTCTCAGCCACATTTATTCCAGCCTAGGATGCAACAATAGAATGAAACTC
 AGTGGACGACCCTACAGACACATGGGAGTGTGGAACTTCAAACCTCTATGACATTCGG
 AAAACTATCTTTACTTTCACTCCACAGTTTATAGACCAGCAACAGTTCTACCTGGCTCTG
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 AACTATGATTACCTGGAATCTGGCAACTGGATGAATGATTATGATTCAACCAGTCATGCT
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 GCCACCTACGTGCAGGAGTTCTGCCCCACAGCATCTGTGCCATGCAATGAGGGCTTTGG
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 AGAGAGAAGTTCGATAAACTAACTACTGTAGAAGAAGTGAACACTTACCTGGAGGCT
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 GATTGGCTTTATTTCTTTCATCATTCAAAAAGTTTGCATGTGTTTTTATTCTCTAGATC
 TGTTACCAATATAGTTTTCTAACTCCTGTTTGGGGAGCAAGTGTAAATAAATACTTATTC
 CTAATAAAAAAAAAAAAAAAAAACTCGACTCTAGATTGCGGCCGCGGTCATAGCTGTTTCTG
 AACAGATCCCGGGTGGCATCCCTGTGACCCCTCCCGAGTGCCT

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002637 unedited
 GTAATTTGTAATACGACTCACTATAGGGCGGCNCGCAATTCGCACCAGGCAGCGGTCGT
 TGACCTGTTGGCGGCGGCCGGGCGGAGGCTGTGGGCCGCGGCGGTCTCCCGGGTTGAG
 GGGAGGATGCAGGAGTCACACGCGGAGGCCGACTGGACTAAGGGGGCAGGAGCGGCGCC
 TGGGGCGCTGCGGCGGGCTCTAGACCGCGGAAGCCAGTGCTAGCGCTGGCGGTGGTG
 GGCCCCTGAGGCCGCGGAGTCCGGAGAGGGACCGAAGGCTCCGGTGGCACCCGGCTAT
 TTCTCAGAGGACAATTAGTAACGTGTCGCATGAGGAGCCGGAGTAACCTCCGGGGTCCGG
 CTGGACGGCTACGCTCGACTGGTGCAACAGACCATCCTGTGCCATCAGAATCCAGTGACT
 GGCTTGCTTCCAGCCAGCTATGATCAGAAAGATGCTTGGGTCCGAGATAATGTGTACAGC
 ATCTTGGCTGTGTGGGTTTGGGCTGGCCTATCGGAAGAATGCAGACCGGGATGAGGAT
 AAGGCAAAGGCCTATGAATTGGAGCAGAGTGTAGTGAAGCTGATGAGAGGACTACTGCAC
 TGCATGATCAGACAGGTGGATAAAGTAGAATCCTTCAAATATAGTCAGAGTACTAAGGAT
 AGCCTNCATGCAAAGTACAACACCAAAACCTGTGCCACTGTAGTGGGTGATGATCAATGG
 GGACACCTGCAGTTGGATGCTACCTCTGTGTACCTGCTCTTCTTAGCCAAATGACTGCC
 TCAGGACTCCATATCATCCACAGCCTAGATGAAGTCAATTCATACAGGACCCTTGTGTT
 TTACATTTGAAGCTGCATATAAACTGCTGACTNCGGATATGGGAACGTGGAGACAAGACC
 ACCCAGGGATCTCANAGATGAGCCAGTTCAAGTTGGATGGCAAAGCAGCCCTGAAGCATAG
 ATN

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002637 unedited
 NNNNTTTTACTCTGNACCGCGNCCGCAATTTNANGATCGNGTTTTTTTTTTTTTTTTTTT
 AGGNATAAGTTATTATTAACACTTGCTCCCAAACAGGATTAGAAAATATATTGGTAAC
 AGATCTAGAGAATAAAAACACATGCAAACCTTTATGAATGATGAAAGAAATAAAGCCAAT
 CATGACAGGCCTGGCTGAGTGTTCACTTACTCATAAGATTGTCAGTGGTTCTGCAAGGT
 GAGCCTCCAGGTAAGTGTTCACTTCTTCTACAGTAGTTAGTTTATCGAAAAAGTTCTCTC
 TTCTTGGGAAGGATGGGACAGAAAGGGCAGGGTTGGAGTGATTAGGCAATAACATTTTA
 GTTCCATGCACAATCAACCGAGGCAGGGACCAGCTGTCAAAGGCTCCAGAAGCCAGGA
 ACCAAAGCCCTCATTGCAATGGCACAGATGCTGTGGGCAGGAACTCCTGCACGTAGGTGG
 CGGCTGCCTTGGAGAGGTAGGTGATGGTCCAAACCTGCCACTGGGTGCACTGTCTATACA
 GAAGAGTACAGATGCCAGATGCGGGATCCTTTGCCAATGATCATCTGCGCCAAGGG
 TTTTCTGTTCTTGAAGGAACAAGTCATTGGCAATATGCACTATTTTTTNCACAGCAATGA
 TGCTTCCGATGCTATGAATTTCAATATCTGCCAGCATGGTGAGGACAAGGATGGCTTCTA
 CCACCAGCTGACGGAACCTTGCTGAAGTCACGATTCAGGACAGACTCCACATGAACAGA
 GAAATTAATCTCACCTGGAGTTATTTCTTATGTTAGTGGTAGAGGAAAGCAAGGCAAACCCCTT
 AAAATAAATCCCGGGACACTTTTGCAAAATTTCCCTACTTTTGGCAAAAACCCCGGA
 ACTTTTTTAGTGTCCCTT

Restriction Sites:

NotI-NotI

ACCN:

NM_002637

Insert Size:

4710 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_002637.1</u> , <u>NP_002628.1</u>
RefSeq Size:	4215 bp
RefSeq ORF:	3672 bp
Locus ID:	5255
UniProt ID:	<u>P46020</u>
Cytogenetics:	Xq13.1
Protein Families:	Druggable Genome
Protein Pathways:	Calcium signaling pathway, Insulin signaling pathway
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, and the skeletal muscle 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 9D, also known as X-linked muscle glycogenosis. Alternatively spliced transcript variants encoding different isoforms have been identified in this gene. A pseudogene has been found on chromosome 1.[provided by RefSeq, Feb 2010]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longest isoform (1).</p>