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Product datasheet for SC319895

PHKA2 (NM_000292) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PHKA2 (NM_000292) Human Untagged Clone
Tag:	Tag Free
Symbol:	PHKA2
Synonyms:	GSD9A; PHK; PYK; PYKL; XLG; XLG2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>OriGene sequence for NM_000292.1
CGCGCCTCCCCGCCGCGCGGAGCTCTGGTTGGCTTGCTTTCCAACCGGACTTTGGGGCTA
GCGTTTAGAAAAGTCTCGACCTCCTCCGGCCCGGTCCCATCCCAAGAACCGACTAAGGCT
GTGAGTGTCCGGGAACCAGACCCGCTTGGAGGCCACAGCCCCGACGTCCCGCGCCCACGC
GGCAGATCGGGCGCTGCGGCCTGGGAGCCTCGGGGAGATGCGGAGCAGGAGCAATTCCGG
GGTCCGCTTGGACGGGTACGCGCGGCTGGTGCAGCAAACCATCCTGTGTTACCAGAATCC
CGTCACGGGGCTGCTGTCAGCCAGCCATGAGCAGAAGGATGCCTGGGTGCGGGATAACAT
CTACAGTATCCTGGCCGTGTGGGGCCTGGGCATGGCCTACCGTAAGAATGCAGACCGCGA
TGAGGACAAGGCCAAGGCCTACGAGCTGGAGCAGAACGTGGTGAAGCTGATGCGAGGTCT
TCTCCAGTGCATGATGAGACAGGTGGCCAAAGTGGAGAAGTTCAAACACACTCAGAGCAC
CAAGGACAGCCTGCACGCCAAGTACAACACCGCCACCTGTGGCACGGTGGTGGGCGACGA
CCAGTGGGGCCACCTCCAGGTGGATGCCACCTCTCTCTTCCTCCTGTTCCTGGCCCAGAT
GACCGCCTCAGGCTTACGTATCATTTTCACTCTCGATGAGGTGGCCTTCATACAGAATCT
TGTCTTTTACATAGAAGCTGCATATAAAGTCGCTGATTATGGAATGTGGGAGCGTGGAGA
TAAGACTAATCAGGGCATCCCGGAATTGAATGCAAGCTCCGTAGGAATGGCCAAGGCAGC
TCTTGAGGCAATTGATGAACTGGACCTTTTTGGAGCCCATGGAGGACGCAAGTCAGTGAT
TCATGTTCTGCCAGATGAGGTCGAGCACTGCCAGTCTATTCTGTTCTCCATGCTGCCAAG
AGCGTCGACATCTAAAGAAATTGATGCTGGACTTCTTTCCATTATTTCCTTCCCGGCCTT
TGCAGTGGAAGATGTAAACCTTGTAAATGTGACCAAAAATGAAATTATTTCTAAGCTCCA
GGGGCGTTATGGATGCTGTCGCTTCCTTCGAGATGGTTATAAAACTCCAAGAGAGGACCC
TAATCGACTGCATTATGACCCTGCTGAACTCAAGCTCTTCGAAAACATTGAATGTGAGTG
GCCTGTGTTTTGGACATATTTTATAATAGATGGAGTCTTCAGTGGTGATGCTGTTCAGGT
CCAAGAATACCGAGAGGCCCTGGAGGGAATACTCATCAGAGGCAAGAATGGGATCCGCCT
GGTGCCTGAACTCTACGCTGTCCCGCCTAACAAGGTAGATGAAGAGTACAAGAATCCTCA
CACAGTAGACCGAGTTCCTATGGGGAAGGTGCCTCATCTGTGGGGCCAATCCTTGTACAT
CCTCAGCTCGCTGTTGGCAGAGGGATTCCTTGCCGCTGGTGAAATCGATCCCTTAAATAG
AAGATTTTCCACTTCAGTCAAACCTGATGTTGTAGTACAAGTTACTGTTTTGGCAGAAAA

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CAATCACATTAAGGACTTATTGAGGAAACACGGGGTGAACGTCCAGAGTATCGCGGACAT
TCATCCAATTCAAGTCCAGCCGGGCCGGATTCTTAGTCACATATATGCCAAGCTTGGACG
GAATAAGAATATGAATTTGAGTGGGCGACCGTATCGACATATTGGTGTCCTTGGAACCTC
TAAACTATATGTGATTAGGAACCAAATCTTTACTTTTACACCCCAGTTCACCGACGAGCA
TCACTTCTACCTGGCCCTCGACAATGAGATGATCGTGGAGATGCTAAGGATCGAGCTGGC
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CACCATGCTCACAAATGATGGCTCAGACATTCATTCTGCTGTGCTCTCCACAATTAGAAA
ACTAGAGGATGGATATTTTGGAGGAGCCAGAGTAAAATTAGGGAACCTTTCGGAATTTCT
CACCACATCGTTCTACACATATCTGACTTTTCTGGATCCAGACTGTGATGAGAAGTTGTT
TGACAATGCCAGCGAAGGGACTTTCAGTCCTGATAGTGATTCAGATTTGGTAGGATATCT
GGAAGACACCTGTAATCAAGAAAGCCAAGACGAACTTGACCATTATATCAACCACCTTCT
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TGAGCTCTATGGGAAAGCCGGCTTGAACCAGGAGTGGGGTCTGATTCGCTACATCTCAGG
CCTTCTCAGGAAGAAAGTGGAGGTCCTGGCTGAGGCCTGCACAGACCTGCTTTCGCACCA
GAAGCAGCTCACCGTGGGCCTGCCGCCCGAGCCCCGGGAGAAGATCATCTCTGCGCCCCT
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CGTCCTCACGCAGGAGATTGTGGTTTACCTGGCCATGTATGTCAGGGCGCAGCCCAGCCT
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CCATACCGGAGTCACCAAAACTGAGAGGAGTGGCATTAACAGACTGAGGAGTGAAATGAA
ACAGATGACTAGGCGGTTTAGTGCTGATGAACAGTTCTTTTCTGTGGGCCAGGCCGCGTC
CAGCAGTGCGCATTCCTCCAAGTCTGCGAGGTCCAGCACCCCATCCTCGCCCACTGGCAC
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GTGGAAGATCCTCCAGAAGTGCCACGGTCTCTCCATCGATGGTTATGTCCTCCCATCCTC
GACGACCCGAGAGATGACCCCGCATGAGATCAAGTTTGCTGTCCATGTCGAATCGGTGCT
GAACCGCGTGCCGCAGCCCGAGTACCGGCAGCTGCTGGTGGAAGCCATCATGGTGCTGAC
GCTGCTCTCGGACACGGAGATGACCAGCATCGGGGGCATCATCCACGTGGACCAGATCGT
GCAGATGGCCAGTCAGCTGTTCTTGCAGGACCAGGTGTCAATTGGTGCCATGGACACCCT
GGAGAAAGACCAAGCCACAGGAATCTGCCACTTCTTTTATGACAGCGCTCCGAGTGGGGC
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CAATTCGGGCTGCCAGATGCAATAGGGTCTCACCTGGAAACATGATCACACTCTCAATCT
GTCACGTGCCCCCTAGCCTTACTGGGAACCTTCTGTCCCCCAAGATCCCCTGTGCTATCA
GGAAAGCATGTCCCATCAGAAACACTCTCGGGGGGCAATGGTAGCACTCACCCTGAAACT
GATGTATGTTAAAGCCACAGAGATAGAGCTGAGGAGTCCTGTGTTCCCCCGCAAGGAGCA
CCCCGGGATCATTTTCTAGGTTCATTTCTCTGGAACATTTGCTGTAGCATCTGGTCTCAC
GGACTCTGAGGAGGAATTGGAAATTGGTCTCTTTTGAGTGCAGAGGGAACTGAGACGCCA
GCTTAAATTGGCTCTTGCAGAGAGTTACAGAAATAGTTTCGATGAGCTAGTGACACATCC
TAAAGATGCAAAGATCCTCCTGGCGGCAGTAGCCTTGACAAGGGCCACCTCTTCACAGGA
TGCAGTCTGTCTGTGCACCAAACTCTTCACCAAATAGAACACTTGTGTCTCTCTGTGAAG
AAGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAA

Restriction Sites: Please inquire

ACCN:	NM_000292
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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_000292.1, NP_000283.1
RefSeq Size:	4566 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
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]