

Product datasheet for **RC230492**

PFKM (NM_001166687) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PFKM (NM_001166687) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PFKM
Synonyms:	ATP-PFK; GSD7; PFK-1; PFK-A; PFK1; PFKA; PFKX; PPP1R122
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC230492 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGACCCATGAAGAGCACCATGCAGCCAAAACCTGGGGATTGGCAAAGCCATTGCTGTCTTAACCTCTG
GTGGAGATGCCCAAGGTATGAATGCTGCTGTCAGGGCTGTGGTTCGAGTTGGTATCTTCACCGGTGCCCG
TGTCTTCTTTGTCCATGAGGGTTATCAAGGCCTGGTGGATGGTGGAGATCACATCAAGGAAGCCACCTGG
GAGAGCGTTTCGATGATGCTTCAGCTGGGAGGCACGGTATTGGAAGTCCCGGTGCAAGGACTTTCGGG
AACGAGAAGGACGACTCCGAGCTGCCTACAACCTGGTGAAGCGTGGGATCACCAATCTCTGTGTCATTGG
GGGTGATGGCAGCCTCACTGGGGCTGACACCTCCGTTCTGAGTGGAGTGACTTGTGAGTGACCTCCAG
AAAGCAGTAAGATCACAGATGAGGAGGCTACGAAGTCCAGCTACCTGAACATTGTGGCCCTGGTTGGGT
CAATTGACAATGACTTCTGTGGCACCATATGACCATTGGCACTGACTCTGCCCTGCATCGGATCATGGA
AATTGTAGATGCCATCACTACCACTGCCAGAGCCACCAGAGGACATTTGTGTTAGAAGTAAATGGGCCGC
CACTGTGGATACCTGGCCCTTGTCACTCTCTGTCTGTGGGGCCGACTGGGTTTTATTCTGAATGTC
CACCAGATGACGACTGGGAGGAACACCTTTGTCGCCGACTCAGCGAGACAAGGACCCGTGGTTCTCGTCT
CAACATCATATTGTGGCTGAGGGTGAATTGACAAGAATGAAAAACCAATCACCTCAGAAGACATCAAG
AATCTGGTGGTTAAGCGTCTGGGATATGACACCCGGGTTACTGTCTTGGGGCATGTGCAGAGGGGTGGGA
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GACCCAGATACCCAGCCTGTGTAGTGAGCCTCTCTGGTAACCAGGCTGTGCGCCTGCCCTCATGGAA
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GAGTGGTTCGCACACAGTGGCTGTGATGAACGTGGGGGCTCCGGCTGCAGGCATGAATGCTGCTGTTCCG
TCCACTGTGAGGATTGGCCTTATCCAGGGCAACCGAGTGTCTCGTTGTCCATGATGGTTTCGAGGGCCTGG
CCAAGGGGCAGATAGAGGAAGCTGGCTGGAGCTATGTTGGGGGCTGGACTGGCCAAGGTGGCTCTAAACT
TGGGACTAAAAGGACTCTACCCAAGAAGAGCTTTGAACAGATCAGTGCCAATATAACTAAGTTTAACT
CAGGGCCTTGTGATCATTGGGGCTTTGAGGCTTACACAGGGGGCCTGGAAGTGTGGAGGGCAGGAAGC
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GCTGGCACAAGCGTCGGGTGTTTATCATTGAGACTATGGGTGGCTACTGTGGCTACCTGGCTACCATGG
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AAATGTTGAACATCTGGTGCAAAAGATGAAAACACTGTGAAAAGGGGCTTGGTGTAAAGGAATGAAAAG
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TAAGATGGGCGCCAAGGCTATGAACTGGATGTCTGGGAAAATCAAAGAGAGTTACCGTAATGGGCGGATC
TTTGCCAATACTCCAGATTCCGGCTGTGTTCTGGGGATGCGTAAGAGGGCTCTGGTCTTCCAACCAAGTGG
CTGAGCTGAAGGACCAGACAGATTTTGTGATCGAATCCCAAGGAACAGTGGTGGCTGAACTGAGGCC
CATCCTCAAAATCCTAGCCAAGTACGAGATTGACTTGGACACTTCAGACCATGCCACCTGGAGCACATC
ACCCGGAAGCGGTCCGGGAAGCTGCCGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC230492 protein sequence
Red=Cloning site Green=Tags(s)

MTHEEHAAKTLGIGKAIAVLTSGGDAQGMNAAVRAVVRVGI FTGARVFFVHEGYQGLVDGGDHIKEATW
ESVSMMLQLGGTVIGSARCKDFREREGRLRAAYNLVKGITNL CVIGDGS LTGADTFRSEWSDLLSDLQ
KAGKITDEEATKSSYLNI VGLVGSIDNDFCGTDMTIGTDSALHRIMEIVDAITTTAQSHQRTFVLEVMGR
HCGYLALVTSLSGADWVFIPECPPDDWEEHLCRRLSETRTRGSRNLNIIVAEGAIDKNGKPITSEDIK
NLVVKRLGYDTRVTVLGHVQRGGTPSAFDRILGSRMGVEAVMALLEGTPDTPACVVSLSGNQAVRLPLME
CVQVTKDVTKAMDEKKFDEALKLRGRSFMNNWEVYKLLAHVRPPVSKSGSHTVAVMNVGAPAAGMNAAVR
STVRIGLIQGNRVLVVHDGFELAKGQIEEAGWSYVGGWTGQGGSKLGTKRTL PPKSFEQISANITKFNI
QGLVIIIGGFEAYTGGLELMEGRKQFDEL CIPFVVIPATVSNNVPGSDFSVGADTALNTICTTCDRIKQSA
AGTKRRVFI IETMGGYCGYLATMAGLAAGADAAYIFEFPFTIRD LQANVEHLVQKMKTTVKRGLVLRNEK
CNENYTTDFIFNLYSEEGKIFDSRKNVLGHMQGGSP TPFDRNFATKMGAKAMNWMGKIKESYRNGRI
FANTPDSGCVLGMRKRALVFQPVAELKDQTD FEHRIPKEQWLLKLRPILKILAKYEIDLDTSDHAHLEHI
TRKRSGEAAV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6209_g10.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_001166687

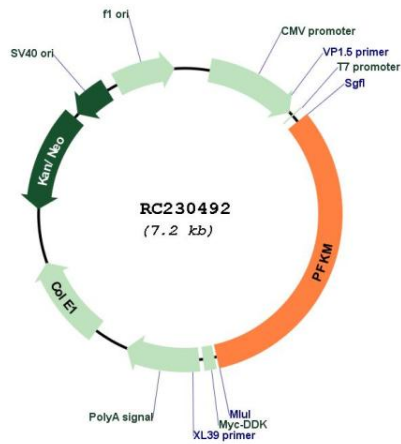
ORF Size: 2340 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001166687.1</u> , <u>NP_001160159.1</u>
RefSeq Size:	3088 bp
RefSeq ORF:	2343 bp
Locus ID:	5213
UniProt ID:	<u>P08237</u>
Cytogenetics:	12q13.11
Protein Families:	Druggable Genome
Protein Pathways:	Fructose and mannose metabolism, Galactose metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways, Pentose phosphate pathway
MW:	85.2 kDa
Gene Summary:	Three phosphofructokinase isozymes exist in humans: muscle, liver and platelet. These isozymes function as subunits of the mammalian tetramer phosphofructokinase, which catalyzes the phosphorylation of fructose-6-phosphate to fructose-1,6-bisphosphate. Tetramer composition varies depending on tissue type. This gene encodes the muscle-type isozyme. Mutations in this gene have been associated with glycogen storage disease type VII, also known as Tarui disease. Alternatively spliced transcript variants have been described. [provided by RefSeq, Nov 2009]

Product images:



Circular map for RC230492