

Product datasheet for **RC230493**

PFKM (NM_001166688) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PFKM (NM_001166688) 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:

>RC230493 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGACCCATGAAGAGCACCATGCAGCCAAAACCCTGGGGATTGGCAAAGCCATTGCTGTCTTAACCTCTG
GTGGAGATGCCCAAGGTATGAATGCTGCTGTCAGGGCTGTGGTTCGAGTTGGTATCTTCACCGGTGCCCG
TGTCTTCTTTGTCCATGAGGGTTATCAAGGCTGGTGGATGGTGGAGATCACATCAAGGAAGCCACCTGG
GAGAGCGTTTCGATGATGCTTCAGCTGGGAGGCACGGTATTGGAAGTCCCGGTGCAAGGACTTTCGGG
AACGAGAAGGACGACTCCGAGCTGCCTACAACCTGGTGAAGCGTGGGATCACCAATCTCTGTGTCATTGG
GGGTGATGGCAGCCTCACTGGGGCTGACACCTCCGTTCTGAGTGGAGTGACTTGTGAGTGACCTCCAG
AAAGCAGTAAGATCACAGATGAGGAGGCTACGAAGTCCAGCTACCTGAACATTGTGGCCCTGGTTGGGT
CAATTGACAATGACTTCTGTGGCACCATATGACCATTGGCACTGACTCTGCCCTGCATCGGATCATGGA
AATTGTAGATGCCATCACTACCACTGCCAGAGCCACCAGAGGACATTTGTGTTAGAAGTAAATGGGCCGC
CACTGTGGATACCTGGCCCTTGTCACTCTCTGTCTGTGGGGCCGACTGGGTTTTATTCTGAATGTC
CACCAGATGACGACTGGGAGGAACACCTTTGTCGCCGACTCAGCGAGACAAGGACCCGTGGTTCTCGTCT
CAACATCATATTGTGGCTGAGGGTGCAATTGACAAGAATGGAACCAATCACCTCAGAAGACATCAAG
AATCTGGTGGTTAAGCGTCTGGGATATGACACCCGGGTTACTGTCTTGGGGCATGTGCAGAGGGGTGGGA
CGCCATCAGCCTTTGACAGAATTCTGGGAGCAGGATGGGTGTGGAAGCAGTGTGGCACTTTTGGAGGG
GACCCAGATACCCAGCCTGTGTAGTGAGCCTCTCTGGTAACCAGGCTGTGCGCCTGCCCTCATGGAA
TGTGTCCAGGTGACCAAGATGTGACCAAGGCCATGGATGAGAAGAAATTTGACGAAGCCCTGAAGCTGA
GAGGCCGAGCTTCATGAACAACCTGGGAGGTGTACAAGCTTCTAGCTCATGTCAGACCCCGGATCTAA
GAGTGGTTCGCACACAGTGGCTGTGATGAACGTGGGGGCTCCGGCTGCAGGCATGAATGCTGCTGTTCCG
TCCACTGTGAGGATTGGCCTTATCCAGGGCAACCGAGTGTCTCGTTGTCCATGATGGTTTCGAGGGCCTGG
CCAAGGGGAGATAGAGGAAGCTGGCTGGAGCTATGTTGGGGGCTGGACTGGCCAAGGTGGCTCTAAACT
TGGGACTAAAAGGACTCTACCCAAGAAGAGCTTTGAACAGATCAGTGCCAATATAACTAAGTTTAACT
CAGGGCCTTGTGATCATTGGGGCTTTGAGGCTTACACAGGGGCTGGAAGTGTGGAGGGCAGGAAGC
AGTTTGTGAGCTCTGCATCCCATTGTGGTCACTCTGCTACAGTCTCCAACAATGTCCCTGGCTCAGA
CTTCAGCGTTGGGGCTGACACAGCACTCAATACTATCTGCACAACCTGTGACCGCATCAAGCAGTCAGCA
GCTGGCACCAAGCGTCGGGTGTTTATCATTGAGACTATGGGTGGCTACTGTGGCTACCTGGCTACCATGG
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AAATGTTGAACATCTGGTGCAAAAGATGAAAACAACCTGTGAAAAGGGGCTTGGTGTAAAGGAATGAAAAG
TGCAATGAGAATATACCACTGACTTCATTTTCAACCTGTACTCTGAGGAGGGGAAGGGCATCTTCGACA
GCAGGAAGAATGTGCTTGGTGCATGCAGCAGGGTGGGAGCCCAACCCATTTGATAGGAATTTGCCAC
TAAGATGGGCGCCAAGGCTATGAACTGGATGTCTGGGAAAATCAAAGAGAGTTACCGTAATGGGCGGATC
TTTGCCAATACTCCAGATTCCGGCTGTGTTCTGGGGATGCGTAAGAGGGCTCTGGTCTTCCAACCAAGTGG
CTGAGCTGAAGGACCAGACAGATTTTGTGATCGAATCCCAAGGAACAGTGGTGGCTGAACTGAGGCC
CATCCTCAAAATCCTAGCCAAGTACGAGATTGACTTGGACACTTCAGACCATGCCACCTGGAGCACATC
ACCCGGAAGCGGTCCGGGAAGCTGCCGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC230493 protein sequence
Red=Cloning site Green=Tags(s)

MTHEEHAAKTLGIGKIAVLTSGGDAQGMNAAVRAVVRVGI FTGARVFFVHEGYQGLVDGGDHIKEATW
ESVSMMLQLGGTVIGSARCKDFREREGRLRAAYNLVKGITNLCVIGDGS LTGADTFRSEWSDLLSDLQ
KAGKITDEEATKSSYLNI VGLVGSIDNDFCGTDMTIGTDSALHRIMEIVDAITTTAQSHQRTFVLEVMGR
HCGYLALVTSLSGADWVFIPECPPDDWEEHLCRRLSETRTRGSRNLNIIVAEGAIDKNGKPITSEDIK
NLVVKRLGYDTRVTVLGHVQRGGTSAFDRILGSRMGVEAVMALLEGTPDTPACVVSLSGNQAVRLPLME
CVQVTKDVTKAMDEKKFDEALKLRGRSFMNNWEVYKLLAHVRPPVSKSGSHTVAVMNVGAPAAGMNAAVR
STVRIGLIQGNRVLVVHDGFEG LAKGQIEEAGWSYVGGWTGQGGSKLGTKRTL PPKSFEQISANITKFNI
QGLVIIIGGF EAYTGGLELMEGRKQFDEL CIPFVVIPATVSNNVPGSDFSVGADTALNTICTTCDRIKQSA
AGTKRRVFI IETMGGYCGYLATMAGLAAGADAAYIFEFPFTIRD LQANVEHLVQKMKTTVKRGLVLRNEK
CNENYTTDFIFNLYSEEGKIFDSRKNVLGHMQGGSP TPFDRNFATKMGAKAMNWM SGIKESYRNGRI
FANTPDSGCVLGM RKRALVFQPVAELKDQTD FEHRIPKEQWLLKLRPILKILAKYEIDLDTSDHAHLEHI
TRKRSGEAAV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

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

Restriction Sites: Sgfl-Mlul

Cloning Scheme:



ACCN: NM_001166688

ORF Size: 2340 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_001166688.1](#), [NP_001160160.1](#)

RefSeq Size: 3177 bp

RefSeq ORF: 2343 bp

Locus ID: 5213

UniProt ID: [P08237](#)

Cytogenetics: 12q13.11

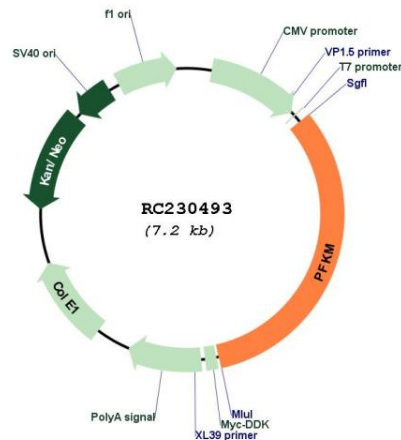
Protein Families: Druggable Genome

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 RC230493