

Product datasheet for **RG224599**

PFKFB1 (NM_002625) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PFKFB1 (NM_002625) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PFKFB1
Synonyms:	F6PK; HL2K; PFRX
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG224599 representing NM_002625
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCTCCAGAGATGGGAGAGCTACCCAAACCAGGTTGCAGAAGATCTGGATTCCACACAGCAGCGGCA
 GCAGCAGGCTGCAACGGAGAAGGGGCTCATCCATACCCAGTTTACCAATTCCCCACAATGGTGATCAT
 GGTGGGTTTACCAGCTCGAGGCAAGACCTATATCTCCACAAAGCTCACACGATATCTCAACTGGATAGGA
 ACACCAACTAAAGTGTAAATTTAGGCCAGTATCGACGAGAGGCAGTGAGCTACAAGAACTATGAATTCT
 TTCTTCCAGACAACATGGAAGCCCTGCAAATCAGGAAGCAGTGCGCCCTGGCAGCCCTGAAGGATGTTCA
 CAACTATCTCAGCCATGAGGAAGGTCATGTTGCGGTTTTTGTATGCCACCAACTACCAGAGAACGACGG
 TCACTGATCCTGCAGTTTGCAAAAGAACATGGTTACAAGGTGTTTTTTCATTGAGTCCATTTGTAATGACC
 CTGGCATAAATGCAGAAAACATCAGGCAAGTAACTTGGCAGCCCTGATTATATAGACTGTGACCGGGA
 AAAGTTCTGGAAGACTTCTAAAGAGAATTGAGTGCTATGAGGTCAACTACCAACCCTTGATGAGGAA
 CTGGACAGCCACCTGTCCATACATCAAGATCTTCGACGTGGGCACACGCTACATGGTGAACCGAGTGCAAG
 ATCACATCCAGAGCCGCACAGTCTACTACCTCATGAATATCCATGTACACCTCGCTCCATCTACCTTTG
 CCGACATGGCGAGAGTGAACATCAACATCAGAGGCCGATCGGAGGTGACTCTGGCCTCTCAGTTCGCGGC
 AAGCAGTATGCCTATGCCCTGGCCAACCTCATTAGTCCCAGGGCATCAGCTCCCTGAAGGTGTGGACCA
 GTCACATGAAGAGGACCATCCAGACAGCTGAGGCCCTGGGTGTCCCCATGAGCAGTGGAAGGCCCTGAA
 TGAGATTGATGCGGGTGTCTGTGAGGAGATGACCTATGAAGAAATCCAGGAACATTACCTGAAGAAATTT
 GCACTGCGAGACCAAGATAAATATCGCTACCGCTATCCCAAGGGAGAGTCCATGAGGATCTGGTTCAGC
 GTCTGGAGCCAGTGATAATGGAGCTAGAACGACAGGAGAATGTACTGGTACTGTCACACAGGCTGTCAT
 CGGGTGCCTCCTGGCCTATTTCCCTGGATAAAAGTTCAGATGAGCTTCCATATCTCAAGTGCCTCTGCAC
 ACAGTGCTCAAACCTACTCCTGTGGCTTATGGCTGCAAAGTGAATCCATCTACCTGAATGTGGAGGCCG
 TGAACACACACCGGGAGAAGCCTGAGAATGTGGACATCACCCGGGAACCTGAGGAAGCCCTGGATACTGT
 CCCAGCCCACTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG224599 representing NM_002625
 Red=Cloning site Green=Tags(s)

MSPEMGELTQTRLQKIWIPIHSSGSSRLQRRRGSSIPQFTNSPTMVIMVGLPARGKTYISTKLTRYLNWIG
 TPTKVFNLGQYRREAVSYKNYEFFLPDNMEALQIRKQCALAALKDVHNYLSHEEGHVAVFDATNTTRERR
 SLILQFAKEHGYKVFVIESICNDPGIIAENIRQVKLGSPDYIDCDREKVLDFLKRIECYEVNYQPLDEE
 LDShLSYIKIFDVGTRYMVNRVQDHIQSRTVYYLMNIHVTPRSIYLCRHGESELNIRGRIGGDSGLSVRG
 KQYAYALANFIQSQGISSLKVVWTSBMKRTIQTAELGVPHEQWKALNEIDAGVCEEMTYEEIQEHYPEEF
 ALRDQDKYRYRYPKGESYEDLVQRLEPVMELERQENVLVICHQAVMRCLLAYFLDKSSDELPLYLKCPLH
 TVLKLTPVAYGCKVESIYLNVEAVNTHREKPNVDITREPEEALDTPPAHY

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_002625

ORF Size: 1413 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_002625.1](#), [NP_002616.1](#)

RefSeq Size: 1741 bp

RefSeq ORF: 1416 bp

Locus ID: 5207

UniProt ID: [P16118](#)

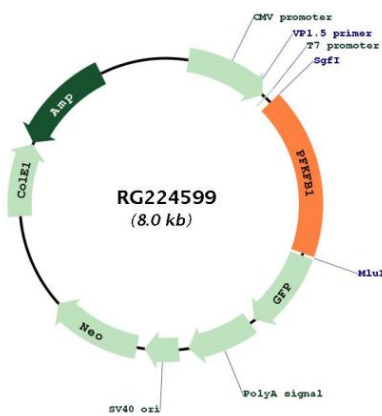
Cytogenetics: Xp11.21

Protein Families: Druggable Genome

Protein Pathways: Fructose and mannose metabolism

Gene Summary: This gene encodes a member of the family of bifunctional 6-phosphofructo-2-kinase:fructose-2,6-biphosphatase enzymes. The enzyme forms a homodimer that catalyzes both the synthesis and degradation of fructose-2,6-biphosphate using independent catalytic domains. Fructose-2,6-biphosphate is an activator of the glycolysis pathway and an inhibitor of the gluconeogenesis pathway. Consequently, regulating fructose-2,6-biphosphate levels through the activity of this enzyme is thought to regulate glucose homeostasis. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Nov 2012]

Product images:



Circular map for RG224599