

Product datasheet for **RG234007**

PFKFB1 (NM_001271805) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PFKFB1 (NM_001271805) 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)
ORF Nucleotide Sequence:	>RG234007 representing NM_001271805 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAAGAAAAACCTCTAGAATAAAAGTGTTTAAATTTAGGCCAGTATCGACGAGAGGCAGTGAGCTACA
AGAACTATGAATCTTTCTTCCAGACAACATGGAAGCCCTGCAAATCAGGAAGCAGTGCGCCCTGGCAGC
CCTGAAGGATGTTCACTACTATCTCAGCCATGAGGAAGGTCATGTTGCGGTTTTGATGCCACCAACT
ACCAGAGAACGACGGTCACTGATCCTGCAGTTTGCAAAGAACATGGTTACAAGGTGTTTTTCATTGAGT
CCATTTGTAATGACCCTGGCATAATTGCAGAAAACATCAGGCAAGTGAACTTGGCAGCCCTGATTATAT
AGACTGTGACCGGAAAAGGTTCTGGAAGACTTTCTAAAGAGAATTGAGTGCTATGAGGTCAACTACCAA
CCCTTGGATGAGGAACTGGACAGCCACCTGTCCCTACATCAAGATCTTCGACGTGGGCACACGCTACATGG
TGAACCGAGTGCAGGATCACATCCAGAGCCGCACAGTCTACTACCTCATGAATATCCATGTCACACCTCG
CTCCATCTACCTTTGCCGACATGGCGAGAGTGAACCAACATCAGAGGCCGCATCGGAGGTGACTCTGGC
CTCTCAGTTCGCGGAAGCAGTATGCCTATGCCCTGGCCAACCTCATTAGTCCCAGGGCATCAGCTCCC
TGAAGGTGTGGACCAGTACATGAAGAGGACCATCCAGACAGTGAAGCCCTGGGTGTCCCTATGAGCA
GTGGAAGGCCCTGAATGAGATTGATGCGGGTGTCTGTGAGGAGATGACCTATGAAGAAATCCAGGAACAT
TACCCTGAAGAATTTGCACTGCGAGACCAAGATAAATATCGCTACCGCTATCCCAAGGGAGAGTCCCTATG
AGGATCTGGTTCAGCGTCTGGAGCCAGTGATAATGGAGCTAGAACGACAGGAGAATGTACTGGTGATCTG
CCACCAGGCTGTCATGCGGTGCCTCCTGGCCTATTTCTGGATAAAAGTTCAGATGAGCTCCATATCTC
AAGTGCCTCTGCACACAGTGTCAAACACTCACTCCTGTGGCTTATGGCTGCAAAGTGAATCCATCTACC
TGAATGTGGAGGCCGTGAACACACACCGGGAGAAGCCTGAGAATGTGGACATCACCCGGAACTGAGGA
AGCCCTGGATACTGTCCAGCCACTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG234007 representing NM_001271805
 Red=Cloning site Green=Tags(s)

MEEKTSRIKVFNLGQYRREAVSYKNYEFFLPDNMEALQIRKQCALAALKDVHNYLSHEEGHVAVFDATNT
 TRERRSLILQFAKEHGKVFVFFIESICNDPGIIAENIRQVKLGSPDYIDCDREKVLDFLKRIECYEVNYQ
 PLDEELDSLHSYIKIFDVGTRYMVNRVQDHIQSRTVYYLMNIHVTPRSIYLCRHGESELNIRGRIGGDSG
 LSVRGKYAYALANFIQSQGISSLKVWTSCHKRTIQTAELGVPYEQWKALNEIDAGVCEEMTYEEIQEH
 YPEEFALRDQDKYRYRYPKGESYEDLVQRLPEVIMELERQENVLVICHQAVMRCLLAYFLDKSSDELPLYL
 KCPLHTVLKLTVPVAYGCKVESIYLNVEAVNTHREKPVNDITREPEEALDTPVAHY

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001271805

ORF Size: 1218 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_001271805.1](#), [NP_001258734.1](#)

RefSeq Size: 1591 bp

RefSeq ORF: 1221 bp

Locus ID: 5207

UniProt ID: [P16118](#)

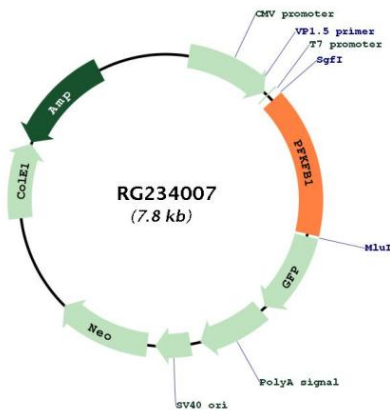
Cytogenetics: Xp11.21

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 RG234007