

Product datasheet for **RG201573**

PFKFB4 (NM_004567) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PFKFB4 (NM_004567) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PFKFB4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG201573 representing NM_004567
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGTCCCCACGGGAATTGACACAGAACCCCTGAAGAAGATCTGGATGCCATACAGCAATGGGCGGC
 CCGCTCTGCACGCTTGCCAGCGCGGTGTGTGCATGACCAACTGCCAACTCTCATTGTGCATGGTGGGCT
 GCCCGCCAGGGGCAAGACCTACATCTCCAAGAAGCTGACTCGATACCTGAACTGGATTGGTGTGCCCACT
 CGGGAGTCAATGTTGGCCAGTATCGCCGGGACGTGGTCAAGACCTACAAATCTTTTGAATTTTTCTCC
 CCGACAATGAAGAGGGCCTGAAAATCAGGAAGCAGTGTGCCCTGGCAGCCCTCCGTGACGTCCGGCGGTT
 CCTTAGTGAGGAGGGGGACATGTGGCGTTTTTGTATGCCACAAACACCACCCGAGAACGGAGAGCGACC
 ATCTTTAATTTTGGAGAACAGAATGGCTACAAGACCTTTTTTGTGAGTCCATCTGTGTGGATCCTGAGG
 TCATAGCTGCCAACATCGTGAAGTAACTGGCAGCCCTGACTATGTCAACCGCGACAGTGTGAGGC
 TACGGAGGACTTCATGAGGCGCATTGAGTGCTATGAGAACTCCTACGAGTCGCTAGATGAGGACCTGGAT
 AGGGACCTGTCTATATCAAGATCATGGATGTGGGCCAGAGCTACGTGGTGAACCGTGTGGCTGACCACA
 TCCAGAGCCGCATCGTATATTACCTCATGAACATCCACGTGACCCCCGCTCCATCTACCTCGCCGCA
 CGGGGAGAGCGAGCTCAACCTCAAGGGCCGGATTGGCGGGACCCAGGACTGTCCCTCGGGGACGGGAG
 TTTGCCAAGAGTCTAGCCAGTTCATCAGTGACCAAAAATCAAGGATCTGAAGGTCTGGACAAGCCAGA
 TGAAGAGGACAATCCAGACGGCTGAGGCACTGGGTGTGCCCTATGAACAGTGAAGGTCTCAACGAGAT
 CGATGCGGGCGTCTGTGAGGAAATGACCTACGAGGAAATTCAGGATAATTATCCACTGGAGTTCGCCCTG
 CGGGACCAGGACAAGTACCGGTACCGGTACCCTAAAGGGGAGTCCCTACGAGGACCTGGTCCAGAGACTGG
 AGCCTGTATCATGGAGCTGGAGAGGCAAGAGAATGTGCTGGTCACTGCCACCAGGCTGTGATGCGTGC
 CCTGCTGCCTACTTCTCGACAAGGCAGCAGAACAGCTGCCCTACCTCAAGTGTCCGCTGCACACAGTC
 CTGAAGCTGACTCCTGTGCATATGTTGTAAAGTGGAGTCCATATTCTGAACGTGGCTGCTGTGAACA
 CGCACCAGGACAGGCTCAGAACGTGGACATCTCAAGACCTCCAGAGGAAGCCCTGTACGGTGCCTGC
 TCACCAAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG201573 representing NM_004567
 Red=Cloning site Green=Tags(s)

MASPRELQNP LKKIWPYSNGR PALHACQ RGVCM TNCPTLIVMVGLPARGKTYISKKLTRYLNWIGVPT
 REFNVGQYRRDVVKTYKSF EFLPDNEEGLKIRKQCALAALRDVRRFLSEEGHVAVFDATNTTRERRAT
 IFNFGQNGYKTFV VESICVDPEVIAANIVQVKLGSPDYVNRDSDEATEDFMRRIECYENSYESLDEDLD
 RDL SYIKIMDVGQSYV VNRVADHIQSRIVYYLMNIHVTPRSIYLCRHGESELNLKGRIGGDPGLSPRGRE
 FAKSLAQFISDQNIKDLK VWT SQMKRTIQTA EALGVPYEQWV LNEIDAGVCEEMTYEEIQDNYPLEFAL
 RDQDKYRYRYPKGESY EDLVQRLEPVI MELERQENVLVICHQAVMRCLL AYFLDKAAEQLPYLKCP LHTY
 LKLT P VAYGCKVESIFLNVA AVNTHRDRPQNVDISR PPEALVTPAHQ

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_004567

ORF Size: 1407 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_004567.4](#)

RefSeq Size: 3503 bp

RefSeq ORF: 1410 bp

Locus ID: 5210

UniProt ID: [Q16877](#)

Cytogenetics: 3p21.31

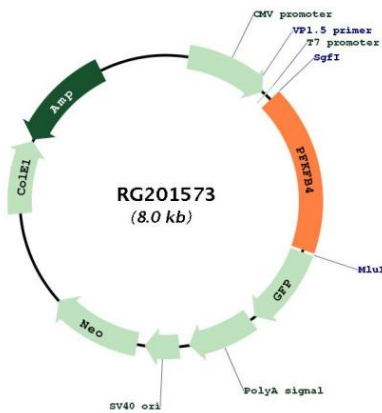
Domains: PGAM, 6PF2K

Protein Families: Druggable Genome

Protein Pathways: Fructose and mannose metabolism

Gene Summary: The protein encoded by this gene is one of four bifunctional kinase/phosphatases that regulate the concentration of the glycolytic byproduct fructose-2,6-bisphosphate (F2,6BP). The encoded protein is highly expressed in cancer cells and is induced by hypoxia. This protein is essential to the survival of cancer cells under conditions of hypoxia, because it increases the amount of F2,6BP and ATP at a time when the cell cannot produce much of them. This finding suggests that this protein may be a good target for disruption in cancer cells, hopefully imperiling their survival. Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2015]

Product images:



Circular map for RG201573