

Product datasheet for **RG227482**

PFKFB3 (NM_001145443) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PFKFB3 (NM_001145443) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PFKFB3
Synonyms:	iPFK-2; IPFK2; PFK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG227482 representing NM_001145443
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCCTTCAGGAAAGCCTGTGGGCCAAAGCTGACCAACTCCCCACCGTCATCGTCATGGTGGGCCTCC
 CCGCCCGGGCAAGACCTACATCTCCAAGAAGCTGACTCGCTACCTCAACTGGATTGGCGTCCCCACAAA
 AGTGTTCAACGTCGGGGAGTATCGCCGGGAGGCTGTGAAGCAGTACAGCTCCTACAACCTCTCCGCCCC
 GACAATGAGGAAGCCATGAAAGTCCGGAAGCAATGTGCCTTAGCTGCCTTGAAGATGTCAAAGCTACC
 TGGCGAAAAGAAGGGGACAAAATTGCGTTTTTCGATGCCACCAATACTACTAGAGAGAGGAGACACATGAT
 CCTTCATTTTCCAAAGAAAATGACTTTAAGGCGTTTTTCATCGAGTCGGTGTGCGACGACCCTACAGTT
 GTGGCCTCCAATATCATGGAAGTAAAACTCCAGCCCGATTACAAAGACTGCAACTCGGCAGAAGCCA
 TGGACGACTTCATGAAGAGGATCAGTTGCTATGAAGCCAGCTACCAGCCCTCGACCCGACAAAATGCGA
 CAGGGACTTGTGCTGATCAAGGTGATTGACGTGGGCCGGAGGTTCTGGTGAACCGGGTGCAGGACCAC
 ATCCAGAGCCGCATCGTGTACTACTGTGAACATCCACGTGCAGCCCGTACCATCTACCTGTGCCCGC
 ACGGCGAGAACGAGCACAACTCCAGGGCCGCATCGGGGGCGACTCAGGCCTGTCCAGCCGGGGCAAGAA
 GTTTGCCAGTGCTCTGAGCAAGTTCGTGGAGGAGCAGAACCTGAAGGACCTGCGCGTGTGGACCAGCCAG
 CTGAAGAGCACCATCCAGACGGCCGAGGCGCTGCGGCTGCCCTACGAGCAGTGAAGGCGCTCAATGAGA
 TCGACGCGGGCGTCTGTGAGGAGCTGACCTACGAGGAGATCAGGGACACCTACCTGAGGAGTATGCGCT
 GCGGGAGCAGGACAAGTACTATTACCGTACCCACCGGGGAGTCTACCAGGACCTGGTCCAGCGCTTG
 GAGCCAGTGATCATGGAGCTGGAGCGGCAGGAGAATGTGCTGGTTCATCTGCCACCAGGCCGCTCTGCGCT
 CCTGAAACTGACGCTGTGCTTATGGCTGCCGTGTGGAATCCATCTACCTGAACGTGGAGTCCGCTGTC
 ACACACCGGGAGAGGTCAGAGGATGCAAAGAAGGACCTAACCCGCTCATGAGACGCAATAGTGTACCC
 CGCTAGCCAGCCCGAACCCACCAAAAAGCCTCGCATCAACAGCTTTGAGGAGCATGTGGCCTCCACCTC
 GGCCGCCCTGCCAGCTGCCTGCCCCGGAGGTGCCACGCAGCTGCCTGGACAAAACATGAAAGGCTCC
 CGGAGCAGCGCTGACTCCTCCAGGAAACAC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG227482 representing NM_001145443
 Red=Cloning site Green=Tags(s)

MPFRKACGPKLTNSPTVIMVGLPARGKTYISKKLTRYLNWIGVPTKVFNVGEYRREAVKQYSSYNFFRP
 DNEEAMKVRKQCALAALRDVKSYLAKEGGQIAVFDATNTTRERRHMILHFAKENDFKAFFIESVCDPTV
 VASNIMEVKISSPDYKDCNSAEAMDDFMKRISCYEASYQPLDPDKCDRDLSLIKVIDVGRFLVNRVQDH
 IQSRIVYYLMNIHVQPTIYLCRHGENEHLQGRIGGDSGLSSRGKFFASALSKFVEEQNLKDLRVWTSQ
 LKSTIQTAELRPLPYEQWKALNEIDAGVCEELTYEEIRDTYPEEYALREQDKYRYPTGESYQDLVQRL
 EPVIMELERQENLVICHQAVLRCLLAYFLDKSAEMPYKCPHLHTVLKLTVPVAYGCRVESIYLNVESVC
 THRRESEDAKKGPNPLMRRNSVPLASPEPTKKPRINSFEEHVASTSAALPSCLPPEVPTQLPGQNMKGS
 RSSADSSRKH

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001145443

ORF Size: 1500 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_001145443.3](#)

RefSeq Size: 4224 bp

RefSeq ORF: 1503 bp

Locus ID: 5209

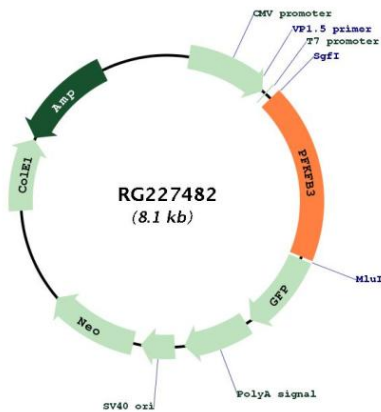
Cytogenetics: 10p15.1

Protein Families: Druggable Genome

Protein Pathways: Fructose and mannose metabolism

Gene Summary: The protein encoded by this gene belongs to a family of bifunctional proteins that are involved in both the synthesis and degradation of fructose-2,6-bisphosphate, a regulatory molecule that controls glycolysis in eukaryotes. The encoded protein has a 6-phosphofructo-2-kinase activity that catalyzes the synthesis of fructose-2,6-bisphosphate (F2,6BP), and a fructose-2,6-bisphosphatase activity that catalyzes the degradation of F2,6BP. This protein is required for cell cycle progression and prevention of apoptosis. It functions as a regulator of cyclin-dependent kinase 1, linking glucose metabolism to cell proliferation and survival in tumor cells. Several alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2016]

Product images:



Circular map for RG227482