

## Product datasheet for **RC238762**

### **PFKFB3 (NM\_001282630) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PFKFB3 (NM_001282630) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PFKFB3
Synonyms:	iPFK-2; IPFK2; PFK2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**ORF Nucleotide Sequence:**

>RC238762 representing NM\_001282630  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGGGGAGGGTGGCCAGAAGGAAGGTGACAGCCAGCAAGCAGGGGCTCTGCCACTCTCTGTCACTGCTG  
 ACACGTTTAGTCCCAAGGCCACTGTCTTCGGTGTCTCCATTAATCCAGCCTGTGGCCAAAGCTGACCAA  
 CCCCCACCGTCATCGTCATGGTGGGCCTCCCGCCCGGGGCAAGACCTACATCTCCAAGAAGCTGACT  
 CGCTACCTCAACTGGATTGGCGTCCCCACAAAAGTGTCAACGTCGGGGAGTATCGCCGGGAGGCTGTGA  
 AGCAGTACAGCTCTACAATTCTTCGCCCCGACAATGAGGAAGCCATGAAAGTCCGGAAGCAATGTGC  
 CTTAGTGCCTTGAGAGATGTCAAAGCTACCTGGCGAAAAGAAGGGGGACAAATTGCGGTTTTCGATGCC  
 ACCAATACTACTAGAGAGAGGAGACACATGATCCTTCATTTTGCCAAAGAAAATGACTTTAAGGCGTTTT  
 TCATCGAGTCGGTGTGCGACGACCCTACAGTTGTGGCCTCCAATATCATGGAAGTAAAACTCCAGCCC  
 GGATTACAAAGACTGCAACTCGGCAGAAGCCATGGACGACTTCATGAAGAGGATCAGTTGCTATGAAGCC  
 AGCTACCAGCCCCCTGACCCCGACAAATGCGACAGGGACTTGTGCTGATCAAGGTGATTGACGTGGGCC  
 GGAGGTTCTGGTGAACCGGGTGCAGGACCACATCCAGAGCCGCATCGTGTACTACCTGATGAACATCCA  
 CGTGCAGCCCGTACCATCTACCTGTGCCGGCACGGCGAGAACGAGCACAACTCCAGGGCCGCATCGGG  
 GCGACTCAGGCCTGTCCAGCCGGGCAAGAAGTTTGCCAGTGTCTGAGCAAGTTCGTGGAGGAGCAGA  
 ACCTGAAGGACCTGCGCGTGTGGACCAGCCAGCTGAAGAGCACCATCCAGACGGCCGAGGCGCTGCGGT  
 GCCCTACGAGCAGTGAAGGCGCTCAATGAGATCGACGCGGGCGTCTGTGAGGAGCTGACCTACGAGGAG  
 ATCAGGGACACCTACCCTGAGGAGTATGCGCTGCGGGAGCAGGACAAGTACTATTACCGCTACCCACCC  
 GGGAGTCTACCAGGACCTGGTCCAGCGCTTGGAGCCAGTGATCATGGAGCTGGAGCGGACGGAATGT  
 GCTGGTCACTGCCACCAGGCCGCTCGCTGCGCTGCTTGCCTACTTCCTGGATAAGAGTGCAGAGGAG  
 ATGCCCTACCTGAAATGCCCTCTTACACCGCTCCTGAAACTGACGCTGTGCTTATGGCTGCCGTGTGG  
 AATCCATCTACCTGAACGTGGAGTCCGTCTGCACACACCGGGAGAGGTCAGAGGATGCAAAGAAGGGACC  
 TAACCCGCTCATGAGACGCAATAGTGTACCCCGCTAGCCAGCCCCGAACCCACCAAAAAGCCTCGCATC  
 AACAGTTTGAGGAGCATGTGGCCTCCACCTCGGCCGCCCTGCCAGCTGCCTGCCCCGGAGGTGCCCA  
 CGCAGTGCCTGGACAAAACATGAAAGGCTCCCGGAGCAGCGTGACTCCTCCAGAAACAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC238762 representing NM\_001282630  
 Red=Cloning site Green=Tags(s)

MGEGGQKEGDSQQAGALPLLQLDTFSPKATVFGVSNPACGPKLTNSPTVIVMVGLPARGKTYISKKLT  
 RYLNWIGVPTKVFNVGEYRREAVKQYSSYNFFRPDNEEAMKVRKQCALAALRDVKSYLEGGQIAVFDA  
 TNTTRERRHMLHF AKENDFKAFFIESVCDDPTVVASNIMEVKISSPDYKDCNSAEAMDDFMKRISCYEA  
 SYQPLDPDKCDRDL SLIKVIDVGRRFLVNRVQDHIQSRIVYYLMNIHVQPRTIYLCRHGNEHNLQGRIG  
 GDSGLSSRGKFFASALSKFVEEQNLKDLRVWTSQLKSTIQTAELRLPYEQWKALNEIDAGVCEELTYEE  
 IRDTYPEEYALREQDKYYRYPTGESYQDLVQRLEPVI MELERQENVLVIHQAVLRCLLAYFLDKSAEE  
 MPYLKCP LHTVLKLPVAYGCRVESIYLNVESVCTHRERSED AKKGNPLMRRNSVTP LASPEPTKPKPRI  
 NSFEEHVASTSAALP SCLPPEVPTQLPGQNMKGSRSSADSSRKH

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

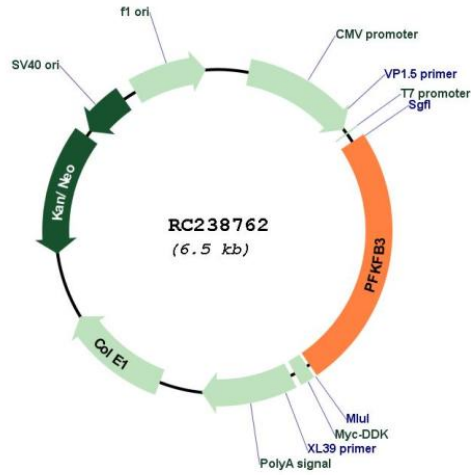
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



<b>ACCN:</b>	NM_001282630
<b>ORF Size:</b>	1602 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001282630.2</a> , <a href="#">NP_001269559.1</a>
<b>RefSeq Size:</b>	4271 bp
<b>RefSeq ORF:</b>	1605 bp
<b>Locus ID:</b>	5209
<b>UniProt ID:</b>	<a href="#">Q16875</a>
<b>Cytogenetics:</b>	10p15.1
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Fructose and mannose metabolism
<b>MW:</b>	61.1 kDa
<b>Gene Summary:</b>	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-biphosphatase 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]