OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC326585

PFKFB3 (NM_001145443) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PFKFB3 (NM_001145443) Human Untagged Clone
Tag:	Tag Free
Symbol:	PFKFB3
Synonyms:	iPFK-2; IPFK2; PFK2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

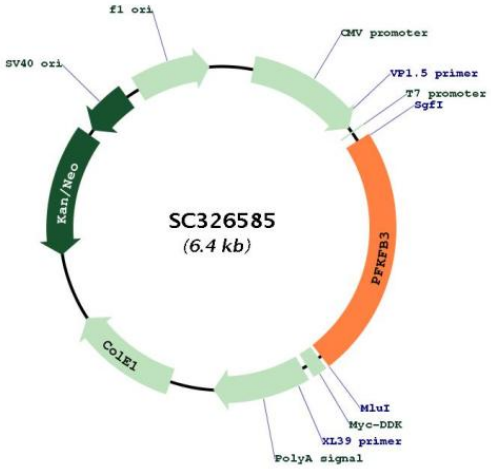
Fully Sequenced ORF:

>SC326585 representing NM_001145443.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGCCCTTCAGGAAAGCCTGTGGGCCAAAGCTGACCAACTCCCCCACCGTCATCGTCATGGTGGGCCTC
CCCGCCCGGGGCAAGACCTACATCTCCAAGAAGCTGACTCGCTACCTCAACTGGATTGGCGTCCCCACA
AAAGTGTTCAACGTCGGGGAGTATCGCCGGGAGGCTGTGAAGCAGTACAGCTCCTACAACTTCTTCCGC
CCCGACAATGAGGAAGCCATGAAAGTCCGGAAGCAATGTGCCTTAGCTGCCTTGAGAGATGTCAAAAGC
TACCTGGCGAAAGAAGGGGGACAAATTGCGGTTTTCGATGCCACCAATACTACTAGAGAGAGGAGACAC
ATGATCCTTCATTTTGCCAAAGAAAATGACTTTAAGGCGTTTTTCATCGAGTCGGTGTGCGACGACCCT
ACAGTTGTGGCCTCCAATATCATGGAAGTTAAAATCTCCAGCCCGGATTACAAAGACTGCAACTCGGCA
GAAGCCATGGACGACTTCATGAAGAGGATCAGTTGCTATGAAGCCAGCTACCAGCCCCTCGACCCCGAC
AAATGCGACAGGGACTTGTCGCTGATCAAGGTGATTGACGTGGGCCGGAGGTTCCTGGTGAACCGGGTG
CAGGACCACATCCAGAGCCGCATCGTGTACTACCTGATGAACATCCACGTGCAGCCGCGTACCATCTAC
CTGTGCCGGCACGGCGAGAACGAGCACAACCTCCAGGGCCGCATCGGGGGCGACTCAGGCCTGTCCAGC
CGGGGCAAGAAGTTTGCCAGTGCTCTGAGCAAGTTCGTGGAGGAGCAGAACCTGAAGGACCTGCGCGTG
TGGACCAGCCAGCTGAAGAGCACCATCCAGACGGCCGAGGCGCTGCGGCTGCCCTACGAGCAGTGGAAG
GCGCTCAATGAGATCGACGCGGGCGTCTGTGAGGAGCTGACCTACGAGGAGATCAGGGACACCTACCCT
GAGGAGTATGCGCTGCGGGAGCAGGACAAGTACTATTACCGCTACCCCACCGGGGAGTCCTACCAGGAC
CTGGTCCAGCGCTTGGAGCCAGTGATCATGGAGCTGGAGCGGCAGGAGAATGTGCTGGTCATCTGCCAC
CAGGCCGTCCTGCGCTGCCTGCTTGCCTACTTCCTGGATAAGAGTGCAGAGGAGATGCCCTACCTGAAA
TGCCCTCTTCACACCGTCCTGAAACTGACGCCTGTCGCTTATGGCTGCCGTGTGGAATCCATCTACCTG
AACGTGGAGTCCGTCTGCACACACCGGGAGAGGTCAGAGGATGCAAAGAAGGGACCTAACCCGCTCATG
AGACGCAATAGTGTCACCCCGCTAGCCAGCCCCGAACCCACCAAAAAGCCTCGCATCAACAGCTTTGAG
GAGCATGTGGCCTCCACCTCGGCCGCCCTGCCCAGCTGCCTGCCCCCGGAGGTGCCCACGCAGCTGCCT
GGACAAAACATGAAAGGCTCCCGGAGCAGCGCTGACTCCTCCAGGAAACACTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI

Plasmid Map:



ACCN: NM_001145443

Insert Size:	1503 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_001145443.2
RefSeq Size:	4226 bp
RefSeq ORF:	1503 bp
Locus ID:	5209
Cytogenetics:	10p15.1
Protein Families:	Druggable Genome
Protein Pathways:	Fructose and mannose metabolism
MW:	57.3 kDa

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-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]
Transcript Variant: This variant (2) uses an alternate 5' terminal exon compared to variant 1. The resulting isoform (2) has a shorter and distinct N-terminus compared to isoform 1.
Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.