

## Product datasheet for **RG234549**

### PKM2 (PKM) (NM\_001206796) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PKM2 (PKM) (NM_001206796) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PKM
Synonyms:	CTHBP; HEL-S-30; OIP3; p58; PK3; PKM2; TCB; THBP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG234549 representing NM\_001206796  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGCAGTGGAGCTCAGAGAGAGGAGAACGGCTCCTCACGCCTGGGCCTGCTCTTCAGAAGTCCCCAGCG  
 CCGTTCCTCCAGATCAGGCGGCTCCTCAGGGCACACCGTATTACGCTCTGAGCGGTCTTTGCTAGTGAG  
 GCCAAGGAGCCACCCTGAGCCAAAAGGGGAGCATTATGTCACCGAAGCCCAACCCAGAGAACCAAAGG  
 ACCTCAGCAGCCATGTCGAAGCCCCATAGTGAAGCCGGGACTGCCTTCATTACAGCCAGCAGCTGCACG  
 CAGCCATGGTGACACATTCTGGAGCACATGTGCCGCTGGACATTGATTACACCCCATCACAGCCCCG  
 GAACACTGGCATCATCTGTACCATTGGCCAGCTTCCCGATCAGTGGAGACGTTGAAGGAGATGATTAAG  
 TCTGGAATGAATGGCTCGTCTGAACCTCTCATGAACTCATGAGTACCATGCGGAGACCATCAAGA  
 ATGTGCGCACAGCCACGAAAGCTTTGCTTCTGACCCCATCTCTACCGCCCGTTGCTGTGGCTCTAGA  
 CACTAAAGGACCTGAGATCCGAAGTGGGCTCATCAAGGGCAGCGGCACTGCAGAGGTGGAGCTGAAGAAG  
 GGAGCCACTCTCAAAATCACGCTGGATAACGCCTACATGGAAAAGTGTGACGAGAACATCCTGTGGCTGG  
 ACTACAAGAACATCTGCAAGGTGGTGAAGTGGGCAGCAAGATCTACGTGGATGATGGGCTTATTTCTCT  
 CCAGGTGAAGCAGAAAGGTGCCGACTTCTGGTGACGGAGGTGGAAAATGGTGGCTCCTTGGGCAGCAAG  
 AAGGGTGTGAACCTTCTGGGGCTGCTGTGGACTTGCCTGCTGTGTCGGAGAAGGACATCCAGGATCTGA  
 AGTTTGGGGTTCGAGCAGGATGTTGATATGGTGTTCGCTCATTATCCGCAAGGCATCTGATGTCCATGA  
 AGTTAGGAAGTCTGGGAGAGAAGGAAAGAACATCAAGATTATCAGCAAAATCGAGAATCATGAGGGG  
 GTTCGGAGGTTTATGAAATCCTGGAGGCCAGTGGGATCATGGTGGCTCGTGGTGTCTAGGCATTG  
 AGATCCTGCAGAGAAGGCTTCTCTTCTCAGAAGATGATGATTGGACGTTGCAACCCAGCTGGGAAGCC  
 GTGCATCTGTGCTACTCAGATGCTGGAGAGCATGATCAAGAAGCCCCGCCCACTCGGGCTGAAGGCAGT  
 GATGTGGCCAATGCAGTCTGGATGGAGCCGACTGCATCATGCTGTCTGGAGAAACAGCCAAAGGGGACT  
 ATCCTCTGGAGGCTGTGCGCATGCAGCACCTGATAGCTCGTGAGGCTGAGGCAGCCATGTTCCACCGCAA  
 GCTGTTTGAAGAACTTGTGCGAGCCTCAAGTCACTCCACAGACCTCATGGAAGCCATGGCCATGGGCAGC  
 GTGGAGGCTTCTATAAGTGTTCAGCAGCAGCTTTGATAGTTCTGACGGAGTCTGGCAGGCTGCTCACC  
 AGGTGGCCAGATACCGCCACGTGCCCCATCATTGCTGTGACCCGGAATCCCCAGACAGCTCGTCAGGC  
 CCACCTGTACCGTGGCATCTCCCTGTGCTGTGCAAGGACCCAGTCCAGGAGGCTGGGCTGAGGACGTG  
 GACCTCCGGGTGAACCTTCCCATGAATGTTGGCAAGGCCGAGGCTTCTCAAGAAGGGAGATGTGGTCA  
 TTGTGCTGACCGATGGCGCCCTGGCTCCGGCTTACCAACACCATGCGTGTGTTCTGTGCC

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG234549 representing NM\_001206796  
 Red=Cloning site Green=Tags(s)

MQWSSERGERLLTPGACSSSEVPSAVPSRSGSPGHTVFSERSLLVPRRSHPEPKGEHYVTGSPTPENQR  
 TSAAMSKPHSEAGTAFIQQLHAAMADTFLEHMCRLDIDSPITARNGTGIICTIGPASRSVETLKEMIK  
 SGMNVARLNFSGTHEYHAETIKNVRTATESFASDPILYRPVAVALDTKGPEIRTGLIKSGTAEVELKK  
 GATLKITLDNAYMEKCDENILWLDYKNICKVVEVGSKIYVDDGLISLQVKQKADFLVTEVENGGSLGSK  
 KGVNLPGAAVDLPAVSEKDIQDLKFGVEQDVMVFAFIRKASDVHEVRKVLGEKGNIKIISKIENHEG  
 VRRFDEILEASDGIMVARGDLGIEIPAENVFLAQKMMIGRCNRAGKPVICATQMLESMIKKPRPTRAEGS  
 DVANAVLDGADCIMLSGETAKGDYPLEAVRMQHLIAREAEAMFHRKLFEEVLRASSHSTDLMAMAMGS  
 VEASYKCLAAALIVLTESGRSAHQVARYRPRAPIIAVTRNPQTARQHLRYGIFPVLCKDPVQEAWAEDV  
 DLRVNFMNVGKARGFFKKGDVIVL TGWRPGSGFTNTMRVVPV

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

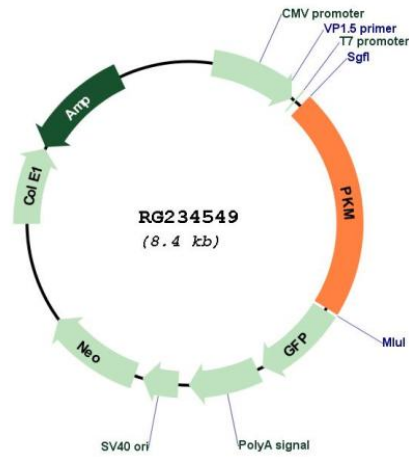
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM\_001206796

ORF Size: 1815 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_001206796.3</a>
<b>RefSeq Size:</b>	2853 bp
<b>RefSeq ORF:</b>	1818 bp
<b>Locus ID:</b>	5315
<b>UniProt ID:</b>	<a href="#">P14618</a>
<b>Cytogenetics:</b>	15q23
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Glycolysis / Gluconeogenesis, Metabolic pathways, Purine metabolism, Pyruvate metabolism, Type II diabetes mellitus
<b>Gene Summary:</b>	This gene encodes a protein involved in glycolysis. The encoded protein is a pyruvate kinase that catalyzes the transfer of a phosphoryl group from phosphoenolpyruvate to ADP, generating ATP and pyruvate. This protein has been shown to interact with thyroid hormone and may mediate cellular metabolic effects induced by thyroid hormones. This protein has been found to bind Opa protein, a bacterial outer membrane protein involved in gonococcal adherence to and invasion of human cells, suggesting a role of this protein in bacterial pathogenesis. Several alternatively spliced transcript variants encoding a few distinct isoforms have been reported. [provided by RefSeq, May 2011]