

## Product datasheet for **RG234328**

### **PKM2 (PKM) (NM\_001206798) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PKM2 (PKM) (NM_001206798) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PKM2
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:**

>RG234328 representing NM\_001206798  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGTCACCGGAAGCCCAACCCAGAGAACCAAAGGACCTCAGCAGCCATGTCGAAGCCCCATAGTGAAGC  
 CGGGACTGCCTTCATTCAGACCCAGCAGCTGCACGCAGCCATGGCTGACACATTCCTGGAGCACATGTGC  
 CGCCTGGACATTGATTCACCACCATCACAGCCCGGAACACTGGCATCATCTGTACCATTGTACCATGCG  
 GAGACCATCAAGAATGTGCGCACAGCCACGAAAGCTTTGCTTCTGACCCCATCCTCTACCGGCCGTTG  
 CTGTGGCTCTAGACACTAAAGGACCTGAGATCCGAACTGGGCTCATCAAGGGCAGCGGCACTGCAGAGGT  
 GGAGCTGAAGAAGGGAGCCACTCTCAAAATCACGCTGGATAACGCCTACATGGAAAAGTGTGACGAGAAC  
 ATCCTGTGGCTGGACTACAAGAATCTGCAAGGTGGTGAAGTGGCAGCAAGATCTACGTGGATGATG  
 GGCTTATTTCTCCAGGTGAAGCAGAAAGGTGCCGACTTCTGGTGACGGAGGTGGAAAATGGTGGCTC  
 CTTGGGCAGCAAGAAGGGTGTGAACCTTCTGGGGCTGCTGTGGACTTGCCTGCTGTGTCGGAGAAGGAC  
 ATCCAGGATCTGAAGTTGGGGTTCGAGCAGGATGTTGATATGGTGTTCGGTTCATCCGCAAGGCAT  
 CTGATGTCATGAAGTTAGGAAGTCTGGGAGAGAAGGGAAAGAACATCAAGATTATCAGCAAAAATCGA  
 GAATCATGAGGGGGTTCGGAGGTTTGTGAAAATCCTGGAGGCCAGTGATGGGATCATGGTGGCTCGTGGT  
 GATCTAGGCATTGAGATTCCTGCAGAGAAGGCTTCTCTTGTCTCAGAAGATGATGATTGGACGGTGAACC  
 GAGCTGGGAAGCCTGTACTCTGTGCTACTCAGATGCTGGAGAGCATGATCAAGAAGCCCCGCCCACTCG  
 GGCTGAAGGCAGTGATGTGGCAATGCAGTCTGGATGGAGCCGACTGCATCATGCTGTCTGGAGAAACA  
 GCCAAAGGGGACTATCCTCTGGAGGCTGTGCGCATGCAGCACCTGATTGCCGTGAGGCAGAGGCTGCCA  
 TCTAACCTTGAATTTAGGAACCTCCGCCCTGGCGCCATTACCAGCAGCCCAACAGAAAGCCAC  
 CGCCGTGGGTGCCGTGGAGGCCCTCTCAAGTGTGAGTGGGGCCATAATCGTCTCCACCAAGTCTGGC  
 AGGTCTGCTCACCAGGTGGCCAGATACCGCCACGTGCCCCATCATTGCTGTGACCCGGAATCCCAGA  
 CAGCTCGTCAGGCCACCTGTACCGTGGCATCTTCCCTGTGCTGTGCAAGGACCCAGTCCAGGAGGCTG  
 GGCTGAGGACGTGGACCTCCGGTGAACTTGCCATGAATGTTGGCAAGGCCGAGGCTTCTCAAGAAG  
 GGAGATGTGGTATTGTGCTGACCGGATGGCGCCTGGCTCCGGCTTACCAACACCATGCGTGTGTTCC  
 CTGTGCCG

**ACGCGTACGCGGCCGCTCGAG** – GFP Tag – GTTTAA

**Protein Sequence:**

>RG234328 representing NM\_001206798  
 Red=Cloning site Green=Tags(s)

MSPEAQPQRTKGPQQPCRSPIVKPLPSFRPSSCTQPWLTHSWSTCAAWTLIHHPSPQPTLASSVPLYHA  
 ETIKNVRTATESFASDPILYRPVAVALDTKGPEIRTGLIKGSGTAEVELKKGATLKITLDNAYMEKCDEN  
 ILWLDYKNICKVVEVGSKIYVDDGLISLQVKQKADFLVTEVENGSLGSKKGVNLPAAVDLPAVSEKD  
 IQDLKFGVEQDVMVFASFIRKASDVHEVRKVLGEKGKNIKIISKIENHEGVRRFDEILEASDGIMVARG  
 DLGIEIPA EKVF LAQKMMIGRCNRAGKPVICATQMLESMIKKPRPTRAEGSDVANAVLDGADCIMLSGET  
 AKGDYPLEAVRMQH LIAREAEAAIYHLQLFEELRRLAPITSDPTEATAVGAVEASFKCCSGAIIVLTKSG  
 RSAHQVARYRPRAPIIAVTRNPQTARQAHL YRGIFPVLCKDPVQEAWAEDVDLRVNFAMNVGKARGFFKK  
 GDVVIVL TGWRPGSGFTNTMRVVPV

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_001206798

**ORF Size:** 1548 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\\_001206798.2](#)

**RefSeq Size:** 2541 bp

**RefSeq ORF:** 1551 bp

**Locus ID:** 5315

**UniProt ID:** [P14618](#)

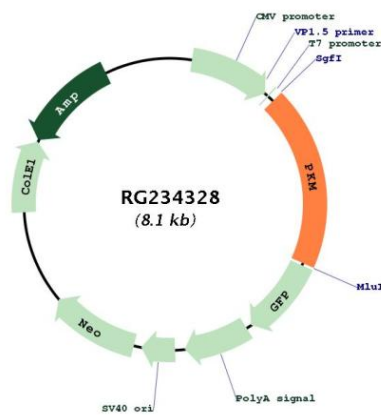
**Cytogenetics:** 15q23

**Protein Families:** Druggable Genome

**Protein Pathways:** Glycolysis / Gluconeogenesis, Metabolic pathways, Purine metabolism, Pyruvate metabolism, Type II diabetes mellitus

**Gene Summary:** 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]

**Product images:**



Circular map for RG234328