

## Product datasheet for **RG234449**

### PGM3 (NM\_001199919) Human Tagged ORF Clone

#### Product data:

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids                        |
| Product Name:             | PGM3 (NM_001199919) Human Tagged ORF Clone |
| Tag:                      | TurboGFP                                   |
| Symbol:                   | PGM3                                       |
| Synonyms:                 | AGM1; IMD23; PAGM; PGM 3                   |
| Mammalian Cell Selection: | Neomycin                                   |
| Vector:                   | pCMV6-AC-GFP (PS100010)                    |
| E. coli Selection:        | Ampicillin (100 ug/mL)                     |



[View online »](#)

**ORF Nucleotide Sequence:**

>RG234449 representing NM\_001199919  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGATTTAGGTGCTATTACAAAATACTCAGCATTACACGCCAAGCCCAATGGACTGATCCTTCAATACG  
 GGACTGCTGGATTTCGAACGAAGGCAGAACATCTTGATCATGTCATGTTTCGCATGGGATTATTAGCTGT  
 CCTGAGGTCAAAAACAGACAAAATCCACTATAGGAGTCATGGTAACAGCGTCCCACAACTCCTGAGGAAGAC  
 AATGGTGTAAAATTGGTTGATCCTTTGGGTGAAATGTTGGCACCATCCTGGGAGGAACATGCCACCTGTT  
 TAGCAAATGCTGAGGAACAAGATATGCAGAGAGTGCTTATTGACATCAGCGAGAAAGAAGCTGTGAATCT  
 GCAACAAGATGCCTTTGTAGTTATTGGTAGAGATACCAGGCCAGCAGTGAGAACTTTCACAATCTGTA  
 ATAGATGGTGTGACTGTTCTAGGAGTCAATCCATGATTATGGCTTGTTAAACAACCCCCAGCTGCACT  
 ACATGGTGTATTGTCGAAACACGGGTGGCCGATATGAAAAGGCAACTATAGAAGGTTACTACCAGAACT  
 CTCTAAGGCTTTTGTGGAACACCAAACAGGCTTCTTGCACTGGAGATGAATACAGATCACTTAAGGTT  
 GACTGTGCAAATGGCATAGGGGCCCTGAAGCTAAGGGAAATGAAACACTACTTCTCACAGGGCCTGTCAG  
 TTCAGCTGTTAATGATGGGTCCAAGGGCAAACTCAATCATTTATGTGGAGCTGACTTTGTGAAAAGTCA  
 TCAGAAACCTCCACAGGAATGGAATTAAGTCCAATGAAAGATGCTGTTCTTTTGTGAGATGCAGAC  
 AGAATTGTTTATTACTACCATGATGCAGATGGCCACTTTCATCTCATAGATGGAGACAAGATAGCAACGT  
 TAATTAGCAGTTTCCTTAAAGAGCTCCTGGTGGAGATTGGAGAAAGTTGAATATTGGTGTGTACAAA  
 TGCATATGCAAATGGAAGTTCAACACGGTATCTTGAAGAAGTTATGAAGGTACCTGTCTATTGCACTAAG  
 ACTGGTGTAAAACATTTGCACCACAAGGCTCAAGAGTTTGACATTGGAGTTTATTTGAAGCAAATGGGC  
 ATGGCACTGCACGTTTTAGTACAGCTGTTGAAATGAAGATAAAAACAATCAGCAGAAACAATGGAAGATA  
 GAAAAGAAAAGCTGCTAAGATGCTTGAACACATTATTGACTTGTTTAACCAGGCAGCTGGTGATGCTATT  
 TCTGACATGCTGGTGATTGAAGCAATCTTGCTCTGAAGGGCTTGACTGTACAACAGTGGGATGCTCTCT  
 ATACAGATCTTCCAAACAGACAACCTTAAAGTTCAGGTTGCAGACAGGAGATTATTAGCACTACCGATGC  
 TGAAAGACAAGCAGTTACACCCCAGGATTACAGGAGGCAATCAATGACCTGGTGAAGAAGTACAAGCTT  
 TCTCGAGCTTTTGTCCGGCCCTCTGGTACAGAAGATGTCGTCGAGTATATGCAGAAGCAGACTCACAAG  
 AAAGTGCAGATCACCTTGACATGAAGTGAAGCTTGGCAGTATTTAGCTGGCTGGAGGAATTGGAGAAAG  
 GCCCAACAGGTTATAAAGCAGCAGAGACAACACACAACATCAACAATGCATTTGGCCAGGAAGTCT  
 AATGAACATACAGTGCCG

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG234449 representing NM\_001199919  
 Red=Cloning site Green=Tags(s)

MDLGAITKYSALHAKPNGLILQYGTAGFRTKAEHLDHVMFRMGLLAVLRSKQTKSTIGVMVTASHNPEED  
 NGVKLVDPDPLGEMLAPSWEEHATCLANAEEQDMQRVLIDISEKEAVNLQQDAFVVIQRDTRPSSEKLSQSV  
 IDGVTVLGGQFHDYGLLTPQLHYMVYCRNTGGRYGKATIEGYYQKLSKAFVELTKQASCSGDEYRSLKV  
 DCANGIGALKLREMEHYFSQGLSVQLFNDGSKGKLNHLGADFKVSHQKPPQMEIKSNERCCSFDGDAD  
 RIVYYYHDADGHFHLIDGDKIATLISSFLKELLVEIGESLNIQVQVQAYANGSSTRYLEEVMKVPVYCTK  
 TGVKHLHHKAQEFDIGVYFEANGHTALFSTAVEMKIKQSAEQLEDKRRKAAKMLENIIDLFNQAAGDAI  
 SDMLVIEAILALKGLTVQQWDALYTDLPNRQLKVQVADRRVISTDAERQAVTPPGLQEAINDLVKYYKL  
 SRAFVRPSGTEDVVRVYAEADSQESADHLAHEVSLAVFQLAGGIGERPQPGYKAAETTHINNAFGPGTA  
 NEHTVP

**TRTRPLE** – GFP Tag – V

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001199919

**ORF Size:** 1698 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\\_001199919.2](#)

**RefSeq Size:** 2092 bp

**RefSeq ORF:** 1701 bp

**Locus ID:** 5238

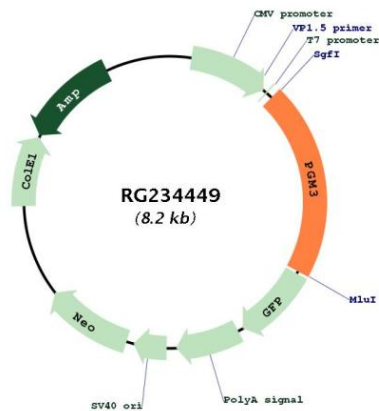
**UniProt ID:** [O95394](#)

**Cytogenetics:** 6q14.1

**Protein Pathways:** Amino sugar and nucleotide sugar metabolism

**Gene Summary:** This gene encodes a member of the phosphohexose mutase family. The encoded protein mediates both glycogen formation and utilization by catalyzing the interconversion of glucose-1-phosphate and glucose-6-phosphate. A non-synonymous single nucleotide polymorphism in this gene may play a role in resistance to diabetic nephropathy and neuropathy. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Dec 2010]

**Product images:**



Circular map for RG234449