

## Product datasheet for MC211338

### Pgam5 (NM\_028273) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Pgam5 (NM_028273) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pgam5
Synonyms:	2610528A17Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC211338 representing NM_028273 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCTTCCGGCAGGCGCTTCAGCTGGCGCCTGTGGTCTGGCCGGTGGCTCGGCCGCTGTTCTTCT  
CGGCGGTGCGGTAGGGAAGCCGCGAGGTGGCGGGATGCAGACACGCGCGACCGAGCCGCCGGCCTG  
GACAGGAGCGCGAGCCGGGCGCGCGTCTGGACACCAACTGGGACAGGCGAGAGCCACTGTCACCTATT  
AACCTGAAGAAAAGGAATGTGGAATCTGGAGAAGACGAGTTGACATCCAGGCTGGATCACTATAAGGCCA  
AGGCCACAAGGCACATCTTCCTCATCCGGCATTCCAGTACCATGTGGATGGCTCCCTGGAGAAGGACCG  
CACCCTGACACCATTAGGTCGGGAACAGGCTGAACTCACGGGGCTCCGACTTGCAAGCCTGGGATTAAG  
TTAATAAAAATTGTCCATTCTCTATGACCCGTGCAAGTAGAGACCACAGACATCATCAGCAAGCACCTGC  
CAGGTGTCTCCAGAGTCAGCACAGACTTGTACGGGAAGGTGCCCCATTGAACCGGATCCACCTGTCTC  
TCACTGGAAGCCAGAGGCTGTGTATTATGAAGATGGAGCCCGATTGAAGCTGCCTTCAGGAACTACATC  
CACCGAGCTGATGCCAGGAGGAGGAGGACAGCTATGAGATCTTCATATGCCATGCCAATGTCATCCGCT  
ATATTGTTGTAGAGCGTTGCAGTTTCCCCAGAAGGTTGGCTCCGCCTGTCCCTCAACAACGGCAGTAT  
CACCCACCTGGTATTGACCCAATGGTCGTGTGGCACTCAGGACCCTTGGGACACAGGGTTCATGCC  
CCAGACAAGATTACTCGGTCC**TGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-MluI
ACCN:	NM_028273
Insert Size:	864 bp



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**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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\\_028273.3](#), [NP\\_082549.2](#)

**RefSeq Size:** 2076 bp

**RefSeq ORF:** 864 bp

**Locus ID:** 72542

**UniProt ID:** [Q8BX10](#)

**Cytogenetics:** 5 F

**Gene Summary:** Displays phosphatase activity for serine/threonine residues, and, dephosphorylates and activates MAP3K5 kinase. Has apparently no phosphoglycerate mutase activity. May be regulator of mitochondrial dynamics. Substrate for a KEAP1-dependent ubiquitin ligase complex. Contributes to the repression of NFE2L2-dependent gene expression (By similarity). Acts as a central mediator for programmed necrosis induced by TNF, by reactive oxygen species and by calcium ionophore.[UniProtKB/Swiss-Prot Function]  
Transcript Variant: This variant (2) uses an alternate in-frame splice site in the 3' coding region, compared to variant 1, which results in a protein (isoform 2) which is 1 amino acid shorter than isoform 1.