

Product datasheet for **RG218774**

Phosphoglucomutase 5 (PGM5) (NM_021965) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phosphoglucomutase 5 (PGM5) (NM_021965) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Phosphoglucomutase 5
Synonyms:	PGMRP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG218774 representing NM_021965
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGAGGGGAGCCCCATCCCGGTGCTGACAGTGCCACCAGCGCCCTACGAGGACCAGCGCCGGCCGGCG
 GCGGGGGTCTGCGGCGACCCACCGGCTCTTCGAGGGCCAGCGCAACTACCTGCCAACTTTATCCAGAG
 CGTGCTGTCGTCATCGACCTGCGCGACCGTCAGGGCTGCACCATGGTGGTGGGAGCGACGCGCAGGTAC
 TTTAGCAGGACGGCCATCGAGATCGTGGTGCAGATGGCCGCGCCAACGGGATTGGACGACTGATTATTG
 GACAGAATGGCATCTTGTGACACCTGCGGTCTCCTGCATTATCAGGAAGATCAAGGCAGCTGGTGAAT
 CATTCTAACAGCCAGCCACTGCCCTGGAGGACCAGGGGGAGATTTGGAGTGAAGTTTAAATGTTGCCAAT
 GGAGGCTCTGCACCCGATGTTGTCTCAGACAAAATCTACCAAATCAGCAAAACGATTGAGGAATATGCTA
 TATGTCCTGATCTCCGAATCGACCTATCTCGACTAGGAAGACAAGAATTTGACCTAGAAAACAAATTCAA
 ACCATTACAGAGTGAGATAGTGGACCCAGTGGATATCTATCTTAACCTCCTTCGGACCATCTTTGACTTT
 CATGCCATCAAGGGTTTGTCTGACTGGACCCAGCCAACCTGAAGATTTCGATTGACGCAATGCACGGAGTTA
 TGGGACCTTATGTGAGAAAAGTTCTGTGTGATGAGCTGGGGGCCCCAGCCAATTCGCAATAAACTGTGT
 TCCCTGGAAGACTTTGGAGGGCAGCACCTGACCCAACTGACATATGCAACGACTCTTCTGGAAGCA
 ATGAAAGGAGGAGAATATGGATTTGGAGCTGCATTTGATGCTGATGGGGACCGTTATATGATCCTAGGCC
 AAAATGGCTTCTTTGTGAGCCCTCTGACTCCCTGGCCATCATTGCTGCCAACCTCTCTTGCATTCCATA
 TTTCCGTCAGATGGGGTCCGCGGGTTGGGAGGAGTAGCCAACCAGCATGGCCCTGGACAGAGTGGCC
 AAATCAATGAAGTCCCTGTATATGAGACCCAGCTGGATGGAGATTCTTCTCAAATCTGATGGACTCAG
 GACGTTGCAATCTGTGTGGGAAGAGAGCTTTGGCACTGGCTTGACCACCTCCGAGAGAAGGATGGCCT
 GTGGGCTGTCTTGGTCTGGCTCTCCATTATTGCTGCCCGGAAGCAGAGTGTGGAGAAAATGTCCGAGAT
 CACTGGGCCAAAATTTGGCCGCCACTACTATTGCAGGTTTACTATGAGGGTTGGATCCCAAGACGACAT
 ATTATATCATGAGGGACCTGGAGGCCCTGGTCACAGACAAATCCTTCATTGGCCAGCAGTTTGTGTGGG
 GAGCCATGTCTACAGCGTGGCGAAGACGGATAGTTTTGAATACGTGGACCCTGTGGATGGCACTGTGACC
 AAGAAACAGGGCCTAAGGATCATTTTCTCGGATGCATCACGGCTCATCTCCGGCTCAGTTCCTCCAGTG
 GTGTGCGGGCCACCCTCAGACTGTACGCAGAGAGCTACGAGAGGGATCCCAGCGGCCATGACCAGGAGCC
 ACAGGCAGTGCTGAGCCCTCTCATAGCCATCGCACTGAAAATATCCAGATTATGAGAGAAGTGGCCGG
 AGGGGACCCACTGTCATCACC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG218774 representing NM_021965
 Red=Cloning site Green=Tags(s)

MEGSPVPLTVPTAPYEDQRPAAGGGLRRPTGLFEGQRNYLPNFIQSVLSSIDLDRDQGMVVGSDGRY
 FSRTAIEIVVQMAAANGIGRLIIGQNGILSTPAVSCIIRKIKAAAGGIILTASHCPGGPGGEFVGFNFVAN
 GGPAPDVVSDKIYQISKTEEYAIICPDLRIDLSRLGRQEFDLNFKPFRVEIVDPVDIYLNLLRTIFDF
 HAIKGLLTGPSQLKIRIDAMHGVMGPYVRKVLCDLDELGAPANSAINCVPLEDFGGQHPDPLTYATLLLEA
 MKGGEYGFGAADFADGDYRMLGQNGFFVSPSDSLAIIAANLSCIPYFRQMGVRFGRSMPTSMALDRVA
 KSMKVPVYETPAGWRFFSNLMDSGRCNLCEESFGTGSDDLREKDGWLAVLWVLSIIAARKQSVVEIVRD
 HWAKFGRHYCRFDYEGLDPKTTYIMRDLEALVTDKSFIGQQFVAVGSHVYSVAKTDSFEYVDPVDGTVT
 KKQGLRIIFSDASRLIFRLSSSSGVRATLRLYAESYERDPSGHDQEPQAVLSPLIAIALKISQIHRTGR
 RGPVTIIT

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_021965

ORF Size: 1701 bp

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 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](#)

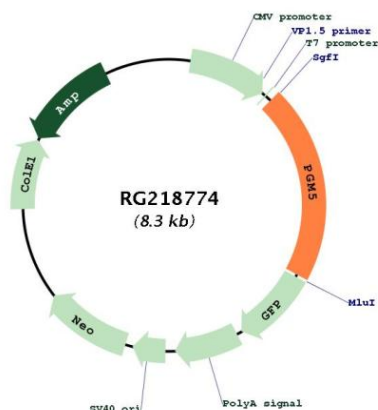
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_021965.4](#)
RefSeq Size: 3341 bp
RefSeq ORF: 1704 bp
Locus ID: 5239
UniProt ID: [Q15124](#)
Cytogenetics: 9q21.11
Protein Families: Druggable Genome
Gene Summary: Phosphoglucomutases (EC 5.2.2.2.), such as PGM5, are phosphotransferases involved in interconversion of glucose-1-phosphate and glucose-6-phosphate. PGM activity is essential in formation of carbohydrates from glucose-6-phosphate and in formation of glucose-6-phosphate from galactose and glycogen (Edwards et al., 1995 [PubMed 8586438]).[supplied by OMIM, Mar 2008]

Product images:


Circular map for RG218774