

Product datasheet for **RC229840**

PGAM5 (NM_001170543) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PGAM5 (NM_001170543) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PGAM5
Synonyms:	BXLBV68
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC229840 representing NM_001170543 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGCGTTCGGCAGGCGCTGCAGCTGGCGCCTGCGGGCTGGCCGGGGCTCGGCCCGCTGCTCTTCT
CGGCCGTGGCGGTAGGGAAGCCGCGCAGGCGGGGACGCGGAGCCACGCCCGGCTGAGCCCGCGCCTG
GGCGGGGGCGCGCGGCCGGCCCGGTGTCTGGGACCCAACTGGGACAGGCGAGAACCCTGTCTCTG
ATCAACGTGCGGAAGAGGAACGTGGAATCTGGGAAGAAGAGCTGGCGTCCAAGCTGGACCACTACAAG
CCAAGGCCACGGCACATCTTCTCATCAGGCATTCAGTACCACGTGGATGGCTCCCTGGAGAAGGA
CCGCACTCTGACCCCGTGGGTGCGGAGCAGGCTGAACCTACTGGCTCCGCTGGCAAGCTTGGGGTTG
AAGTTTAATAAAATCGTCCATTCGTCATGACGCGGCCATAGAGACCACCGATATCATCAGCCGGCACC
TGCCAGGCGTCTGCAAAGTCAGCACAGATCTGCTGCGGGAAGGCGCCCATCGAGCCAGACCCGCCGT
GTCTCATTGGAAGCCGGAAGCTGTGCAATTACGAAGACGGAGCCCGGATCGAGGCCGCTTCCGGAAC
TACATCCACCGCGCAGATGCCAGGCAGGAGGAGACAGTTACGAGATCTTCATCTGTACGCCAACGTCA
TCCGCTACATCGTGTGCAGAGCACTGCAGTTTCTCCTGAAGGCTGGCTCCGGCTCTCCCTCAATAATGG
CAGCATACCCACCTGGTGATCCGACCCAAACGGCCGAGTTGCGCTCAGGACCTCGGGGACACGGGGTTC
ATGCCTCCGACAAGATCACTCGATCC

ACGCGTACGCGGGCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC229840 representing NM_001170543
Red=Cloning site Green=Tags(s)

MAFRQALQLAACGLAGGSAAVLFSAVAVGKPRAGGDAEPRPAEPPAWAGGARPGPGVWDPNWRREPLSL
 INVNRKNVESGEEELASKLDHYKAKATRHIFLIRHSQYHVDGSLEKDRTLTPLGREQAE LTGLRLASLGL
 KFNKIVHSSMTRAIETTDIISRHLPGVCKVSTDLLREGAPIEDPPVSHWKPEAVQYEDGARIEAAFRN
 YIHRADARQEEDSYEIFICHANVIRYIVCRALQFPPEGWLRSLNNGSITHLVIRPNGRVALRTLGDGTGF
 MPPDKITRS

TRTRPLEQKLISEEDLANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4190_c01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001170543

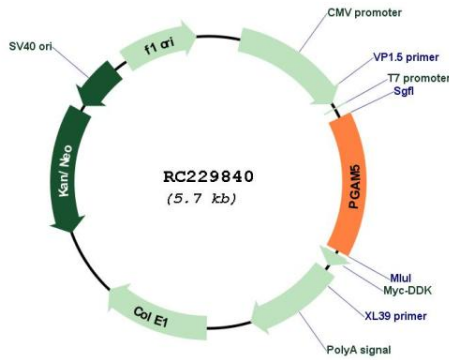
ORF Size: 867 bp

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.

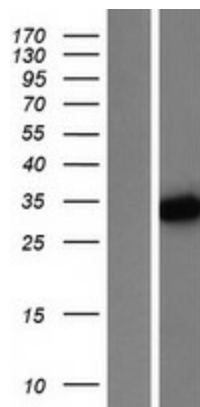
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	<ol style="list-style-type: none">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_001170543.2
RefSeq ORF:	870 bp
Locus ID:	192111
UniProt ID:	Q96HS1
Cytogenetics:	12q24.33
Protein Families:	Transmembrane
MW:	32.5 kDa
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. Acts as a central mediator for programmed necrosis induced by TNF, by reactive oxygen species and by calcium ionophore.[UniProtKB/Swiss-Prot Function]

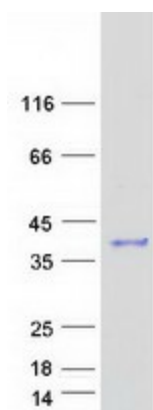
Product images:



Circular map for RC229840



Western blot validation of overexpression lysate (Cat# [LY432840]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229840 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PGAM5 protein (Cat# [TP329840]). The protein was produced from HEK293T cells transfected with PGAM5 cDNA clone (Cat# RC229840) using MegaTran 2.0 (Cat# [TT210002]).