

Product datasheet for SC119988

PGK1 (NM_000291) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PGK1 (NM_000291) Human Untagged Clone
Tag:	Tag Free
Symbol:	PGK1
Synonyms:	HEL-S-68p; MIG10; PGKA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC119988 sequence for NM_000291 edited (data generated by NextGen Sequencing)

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ATGTCGCTTTCTAACAAAGCTGACGCTGGACAAGCTGGACGTTAAAGGGAAGCGGGTCGTT
ATGAGAGTCGACTTCAATGTTTCTATGAAGAACAACCAGATAAACAAACAACCAGAGGATT
AAGGCTGTGTGCCAAGCATCAAATTCTGCTTGGACAATGGAGCCAAGTCGGTAGTCCTT
ATGAGCCACCTAGGCCGGCCTGATGGTGTGCCATGCCTGACAAGTACTCCTTAGAGCCA
GTTGCTGTAGAACTCAAATCTCTGCTGGCAAGGATGTTCTGTTCTTGAAGGACTGTGTA
GGCCCAGAAGTGGAGAAAGCCTGTGCCAACCCAGCTGCTGGGTCTGTCATCCTGCTGGAG
AACCTCCGCTTTCATGTGGAGGAAGAAGGAAGGGAAAAGATGCTTCTGGGAACAAGGTT
AAAGCCGAGCCAGCCAAAATAGAAGCTTCCGAGCTTCACTTTCCAAGCTAGGGGATGTC
TATGTCAATGATGCTTTTGGCACTGCTCACAGAGCCCACAGCTCCATGGTAGGAGTCAAT
CTGCCACAGAAGGCTGGTGGGTTTTTGTGAAGAAGGAGCTGAACACTTTGCAAAGGCC
TTGGAGAGCCCAGAGCGACCCCTTCTGGCCATCCTGGGCGGAGCTAAAGTTGCAGACAAG
ATCCAGCTCATCAATAATATGCTGGACAAAGTCAATGAGATGATTATTGGTGGTGGAAATG
GCTTTTACCTTCCCTTAAGGTGCTCAACAACATGGAGATTGGCACTTCTCTGTTTGTGAA
GAGGGAGCCAAGATTGTCAAAGACCTAATGTCCAAAGCTGAGAAGAATGGTGTGAAGATT
ACCTTGCCTGTTGACTTTGTCACCTGCTGACAAGTTTGTGAGAATGCCAAGACTGGCCAA
GCCACTGTGGCTTCTGGCATACTGCTGGCTGGATGGGCTTGGACTGTGGTCTGAAAGC
AGCAAGAAGTATGCTGAGGCTGCTCACTCGGGCTAAGCAGATTGTGTGGAATGGTCTGTG
GGGGTATTTGAATGGGAAGCTTTTGGCCGGGGAACCAAAGCTCTCATGGATGAGGTGGTG
AAAGCCACTTCTAGGGGCTGCATCACCATCATAGGTGGTGGAGACTGCCAATTGCTGT
GCCAAATGGAACCGGAGGATAAAGTCAGCCATGTGAGCACTGGGGGTGGTCCAGTTTG
GAGCTCCTGGAAGGTAAAGTCCTTCTGGGGTGGATGCTCTCAGCAATATTTAG

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Clone variation with respect to NM_000291.3



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000291 unedited
 GTTAGGAATTGTATCCGACTCCTATAGGCGGCCGCGCAATTCGCACGAGGCCGCATTCTG
 CAAGCCTCCGGAGCGCACGTCCGGCAGTCGGCTCCCTCGTTGACCGAATCACCGACCTCTC
 TCCCCAGCTGTATTTCCAAAATGTCGCTTTCTAACAAAGCTGACGCTGGACAAGCTGGACG
 TAAAGGGAAGCGGGTCGTTATGAGAGTCGACTTCAATGTTCTATGAAGAACAACCAGA
 TAACAAACAACCAGAGGATTAAGGCTGCTGTCCAAGCATCAAATCTGCTTGGACAATG
 GAGCCAAGTCGGTAGTCCTTATGAGCCACCTAGGCCGGCCTGATGGTGTGCCCATGCCTG
 ACAAGTACTCCTTAGAGCCAGTTGCTGTAGAACTCAAATCTCTGCTGGGCAAGGATGTTT
 TGTTCTTGAAGGACTGTGTAGGCCCAGAAGTGGAGAAAGCCTGTCCAACCCAGCTGCNT
 GGGTCTGTCATCTGCTGGAGAACCCTCCGCTTTCATGTGGAGGAAGAAGGGAAGGAAAA
 GATGCTTCTGGGAACAAGGTTAAAGCCGAGCCAGCCAAAATAGAAGCTTTCGAGCTTCA
 CTTTCCAAGCNTAGGGGATGTCTATGTCAATGATGCTTTTGGCACTGCTCACAGAGCCCA
 CAGCTCCATGGTAGGAGTCAATCTGCCACAGAAGGCTGGTGGGTTNNTGATGAAGAAGGA
 GCTGAACTACTTTGNCAAGGCCCTGGAGAGCCCAGAGCGACCCTTCTGGCCATCCTGNG
 CGGAGCTAAAGNTGCAGACCAGATCCAGCTCATCAATAATATGCTGGACAAAGTCAATGA
 GATGATTATTGGTGGNTGGAAATGGCTTACCTTCCTTAANNGTGCTCACACATGGAGAT
 GCCCTTNCCTTGTTTGTGAAAAGGA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_000291 unedited
 ATGGCACTTCCAGGGCCAGGTANAGCACTGGTGGNAGGGGTCACAGGGNATGCCACCCG
 GGTATCTGGTTCAGGNAAACAGCTATGACCGCGGCCGAATCTAGAGTCGAGTTTTTTTTT
 TTTTTTTTTTACGGTTTCAATGGACACTTTTATTGTTTACTTAATGGATCATCAATTTT
 GTCTCACTACCTACAAATGGAATTTTCATCTTGTTCATGCTGAGTAGTAAACAGTGAC
 AAAGCTAATCATAATAACCTACATCAAAAAGAGAACTAAGCTAACACTGCTCACTTTCTTT
 TTAACAGGCAAAAATATAATATATGCACTCTAGAATGCACAATGGTTTATCACTAAAAA
 ATTCAAATGGGATCTTGAAGAATGTATGCAAAATCCAGGGTGCAGAGAAAAAGAGCTGATA
 TGCTGTGCAACTGTTTAAAGGTTCTGGCACTGCATCTTTGGCCACTAGCTGAATCTTG
 ACATGGAAGGTTTTAGCTAATGCCAAGTGGAGATGCAGAAAAATGCTAAGTTGACTTAGGG
 GCTGTGCACAGGAACTAAAAGGCAGGAAAGTACTAAATATTGCTGAGAGCATCCACCCCA
 GGAAGGACTTTACCTCCAGGAGCTCCAACTGGCACCACCCCACTGCTCACATGGCTG
 ACTTTATCCTCCGTGTTCCATTTGGCACAGCAAGTGGCAGTGTCTCCACCACCTATGATG
 GTGATGCAGCCCCANAAAGTGGCTTTTACACCTCATCCATGAGAAGCTTTGGTTCCCGG
 GGCAAAAGCTTTCCATTCAAATACCCNNCACAGGACCATTCCACACAAATCTGCTTAGNC
 CCCGATGACAGNCCTNAGCATACTTTCTTGTGCTTTTTCAGAACCACAAGTCCAAGCCC

Restriction Sites:

NotI-NotI

ACCN:

NM_000291

Insert Size:

1910 bp

OTI Disclaimer:

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

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_000291.2](#), [NP_000282.1](#)

RefSeq Size: 2338 bp

RefSeq ORF: 1254 bp

Locus ID: 5230

UniProt ID: [P00558](#)

Cytogenetics: Xq21.1

Domains: PGK

Protein Families: Druggable Genome

Protein Pathways: Glycolysis / Gluconeogenesis, Metabolic pathways

Gene Summary: The protein encoded by this gene is a glycolytic enzyme that catalyzes the conversion of 1,3-diphosphoglycerate to 3-phosphoglycerate. The encoded protein may also act as a cofactor for polymerase alpha. Additionally, this protein is secreted by tumor cells where it participates in angiogenesis by functioning to reduce disulfide bonds in the serine protease, plasmin, which consequently leads to the release of the tumor blood vessel inhibitor angiostatin. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Deficiency of the enzyme is associated with a wide range of clinical phenotypes hemolytic anemia and neurological impairment. Pseudogenes of this gene have been defined on chromosomes 19, 21 and the X chromosome. [provided by RefSeq, Jan 2014]