

Product datasheet for **SC119062**

BPGM (NM_001724) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BPGM (NM_001724) Human Untagged Clone
Tag:	Tag Free
Symbol:	BPGM
Synonyms:	DPGM; ECYT8
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC119062 sequence for NM_001724 edited (data generated by NextGen Sequencing)

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ATGTCCAAGTACAACTTATTATGTTAAGACATGGAGAGGGTGCCTTGAATAAGGAGAAC
CGTTTTTGTAGCTGGGTGGATCAGAACTCAACAGCGAAGGAATGGAGGAAGCTCGGAAC
TGTGGGAAGCAACTCAAAGCGTTAACTTTGAGTTTGATCTTGTATTCACATCTGCCTT
AATCGGTCCATTACACAGCCTGGCTGATCCTGGAAGAGCTAGGCCAGGAATGGGTGCCT
GTGGAAAGCTCCTGGCGTCTAAATGAGCGTCACTATGGGGCCTTGATCGGTCTCAACAGG
GAGCAGATGGCTTTGAATCATGGTGAAGAACAAGTGAGGCTCTGGAGAAGAAGCTACAAT
GTAACCCCGCCTCCCATTGAGGAGTCTCATCCTTACTACCAAGAAATCTACAACGACCGG
AGGTATAAAGTATGCGATGTGCCCTTGGATCAACTGCCACGGTCGGAAAGCTTAAAGGAT
GTTCTGGAGAGACTCCTCCCTATTGGAATGAAAGGATTGCTCCCGAAGTATTACATGGC
AAAACCATTCTGATATCTGCTCATGGAAATAGCAGTAGGGCACTCTAAAACACCTGGAA
GGTATCTCAGATGAAGACATCATCAACATTACTCTTCTACTGGAGTCCCCATTCTTCTG
GAATTGGATGAAAACCTGCGTGCTGTTGGGCCTCATCAGTTCTGGGTGACCAAGAGGCG
ATCCAAGCAGCCATTAAGAAAGTAGAAGATCAAGGAAAAGTGAACAAGCTAAAAAATAG
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Clone variation with respect to NM_001724.4
536 g=>a



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_001724 unedited</p> <p>TACGACTCTCTATAGGCGGTGCGGAATTCGGCACGAGGTGCTGTCTTGAATATTAGCCC ATTTGAAAACGCCTGGGAAGTTCAGCCATCAGTATGTCCAAGTACAACTTATTATGTTA AGACATGGAGAGGGTGCTTGAATAAAGGAGAACCGTTTTTGTAGCTGGGTGGATCAGAAA CTCAACAGCGAAGGAATGGAGGAAGCTCGGAAGTGTGGGAAGCAACTCAAAGCGTTAAAC TTTGAGTTTGATCTTGTATTCACATCTGTCCTTAATCGGTCCATTACACAGCCTGGCTG ATCCTGGAAGAGCTAGGCCAGGAATGGGTGCCTGTGAAAAGCTCCTGGCGTCTAAATGAG CGTCACTATGGGCGCTTGATCGGTCTCAACAGGGAGCAGATGGCTTTGAATCATGGTGAA GAACAAGTGAGGCTCTGGAGAAGAAGCTACAATGTAACCCCGCCTCCATTGAGGAGTCT CATCCTTACTACCAAGANATCTACAACGACCGGAGGTATAAAGTATGCGATGTGCCCTTG GATCAACTGCCACGGTCGGAAAGCTTCTAGGATGTTCTGGAGAGACTCCTTCCCTATTGG AATGAAAGGATTGCTCCCGAAGTATTACATGGCAAACCATTTCTGATATCTGCTCATGGA AATAGCAGTAGGGCACTCTAAAACACCTGGAAGGTATCTCAGATGAAGACATCATCAAC ATTACTCTTTCTACTGGAGTCCCATTCTTCTGAAATTGGATGAAAACCTGCGTGCTGTT GGGCCTCATCAGTCTGGGTGACCCAAGAGGCGATCCAAGCCGCTTTTAAGAAGTNNNA AGATCCAGGAAAAGTGGAAACCAGCTAAAAAATAGCCTTTCTCAACTGTTGCCTAAAAAAA ATGCCAAAGAGTGGCCTAGGAATGGGGTATGGGGCTGACTTTTTCTTTTTTCCCGGATT TCT</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_001724 unedited</p> <p>CGGCCCGCAATCTAAAGTCGAGTTTTTTTTTTTTTTTTTTTGGCATTTCAGTCACTTTAT TATCAGGAACTTTATTTTTAAACTAATTACAGGTACCCAAAGTTCAAAAAATTAACAA ACCAAAATGAGAACCTCAACAGCCATAGTTGTTTATTTGCTGCTATTCTTGTGGCCAAA GAGGAATTCTACTAAATGCAAAATGAAGGATGTCTCTAAACTAGAAGACAAGTTAAAGGG CCTTGTGTGTCATTCTGTGATTGTGGTGGTGGTTGTTGGCTTTCTTGGAGAAATATATCT GTGACTTTCTCAACTAATGGGCCTCTGGCCTAATTATCAAAGTATCCCTTTTCTAGAG GAAAAGACTAGTAATAAATACATACGGGATATTATCTAATATCCCTTACTGTTATCCAG AAAATCTTATTAATAATTAAGTGAAGTACTGATTAGAATAGTGCCTGTCAATGGTGACT CAATAATGATTTCTTGAATGATAAATACCTTTAACTTCATCTCTACTTGTGCTCTCCA TCTCAGAAAATTATGACCTTCATTAAGCCCCACTAGTTACTAGTTTGGTGACCGACTAGG GGGCTAGCAAGAAAGCTAACTCATAAGGCTATGACATAAGCACTGAGGCATCCTAAAGCC TTATCTGGGCCACAATAAGTTACCTAGTTACCTATACAACTCTACTCCACAGCCTACCT CCTGAAAATCGGGGAAAAAGAGAGAGAGTTCAGCACCCATAACACACTCCTATGCCACTT CTTTTGCATTTCTTACCACAGTTGAGAAGACTATTTTTAGCTGGNTTCACTTTTCT GAACTTCACTTTCTTAGGCCTGCTNGAACCCTTTTGTCCCCCGAACTGATAAGCCAC CGCCCCAGGTTTCTACAATCCACAAAAAGGGACCCCTAGAAAAGACGTCGAAATGGTT CTTTCAAACTTCAGT</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_001724
Insert Size:	1650 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:	<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_001724.3 , NP_001715.1
RefSeq Size:	1769 bp
RefSeq ORF:	780 bp
Locus ID:	669
UniProt ID:	P07738
Cytogenetics:	7q33
Domains:	PGAM
Protein Families:	Druggable Genome
Protein Pathways:	Glycolysis / Gluconeogenesis, Metabolic pathways
Gene Summary:	<p>2,3-diphosphoglycerate (2,3-DPG) is a small molecule found at high concentrations in red blood cells where it binds to and decreases the oxygen affinity of hemoglobin. This gene encodes a multifunctional enzyme that catalyzes 2,3-DPG synthesis via its synthetase activity, and 2,3-DPG degradation via its phosphatase activity. The enzyme also has phosphoglycerate phosphomutase activity. Deficiency of this enzyme increases the affinity of cells for oxygen. Mutations in this gene result in hemolytic anemia. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Sep 2009]</p> <p>Transcript Variant: This variant (1) differs in the 5' UTR compared to variant 2. Variants 1, 2, and 3 encode the same protein.</p>