OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for SC307893

BPGM (NM_199186) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	BPGM (NM_199186) Human Untagged Clone
Tag:	Tag Free
Symbol:	BPGM
Synonyms:	DPGM; ECYT8
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC307893 representing NM_199186. Blue=Insert sequence Red=Cloning site Green=Tag(s) GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC ATGTCCAAGTACAAACTTATTATGTTAAGACATGGAGAGGGTGCTTGGAATAAGGAGAACCGTTTTTGT AGCTGGGTGGATCAGAAACTCAACAGCGAAGGAATGGAGGAAGCTCGGAACTGTGGGAAGCAACTCAAA GCGTTAAACTTTGAGTTTGATCTTGTATTCACATCTGTCCTTAATCGGTCCATTCACACAGCCTGGCTG ATCCTGGAAGAGCTAGGCCAGGAATGGGTGCCTGTGGAAAGCTCCTGGCGTCTAAATGAGCGTCACTAT GGGGCCTTGATCGGTCTCAACAGGGAGCAGATGGCTTTGAATCATGGTGAAGAACAAGTGAGGCTCTGG AGAAGAAGCTACAATGTAACCCCGCCTCCCATTGAGGAGTCTCATCCTTACTACCAAGAAATCTACAAC GACCGGAGGTATAAAGTATGCGATGTGCCCTTGGATCAACTGCCACGGTCGGAAAGCTTAAAGGATGTT CTGGAGAGACTCCTTCCCTATTGGAATGAAAGGATTGCTCCCGAAGTATTACGTGGCAAAACCATTCTG ATATCTGCTCATGGAAATAGCAGTAGGGCACTCCTAAAACACCTGGAAGGTATCTCAGATGAAGACATC ATCAACATTACTCTTCCTACTGGAGTCCCCATTCTTCTGGAATTGGATGAAAACCTGCGTGCTGTTGGG CCTCATCAGTTCCTGGGTGACCAAGAGGCGATCCAAGCAGCCATTAAGAAAGTAGAAGATCAAGGAAAA GTGAAACAAGCTAAAAAATAG ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
Restriction Sites:	SgfI-MluI
Plasmid Map:	
ACCN:	NM_199186
Insert Size:	780 bp

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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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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_199186.2
RefSeq Size:	2121 bp
RefSeq ORF:	780 bp
Locus ID:	669
UniProt ID:	P07738
Cytogenetics:	7q33
Protein Families:	Druggable Genome
Protein Pathways:	Glycolysis / Gluconeogenesis, Metabolic pathways
MW:	30 kDa
Gene Summary:	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] Transcript Variant: This variant (2) represents the longer transcript. Variants 1, 2, and 3 encode the same protein.