

## **Product datasheet for SC334887**

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## BPGM (NM\_001293085) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** BPGM (NM\_001293085) Human Untagged Clone

Tag: Tag Free Symbol: BPGM

Synonyms: DPGM; ECYT8

Vector: pCMV6 series

Fully Sequenced ORF: >NCBI ORF sequence for NM\_001293085, the custom clone sequence may differ by one or

more nucleotides

ATGTCCAAGTACAAACTTATTATGTTAAGACATGGAGAGGGTGCTTGGAATAAGGAGAACCGTTTTTGTA
GCTGGGTGGATCAGAAACTCAACAGCGAAGGAATGGAGGAGGCTCGGAACTGTGGGAAGCAACTCAAAGC
GTTAAACTTTGAGTTTGATCTTGTATTCACATCTGTCCTTAATCGGTCCATTCACACAGCCTGGCTGATC
CTGGAAGAGCTAGGCCAGGAATGGGTGCCTGTGGAAAGCTCCTGGCGTCTAAATGAGCGTCACTATGGGG
CCTTGATCGGTCTCAACAGGGAGCAGATGGCTTTGAATCATGGTGAAGAACAAGTGAGGCTCTGGAGAG
AAGCTACAATGTAACCCCGCCTCCCATTGAGGAGTCTCATCCTTACTACCAAGAAATCTACAACGACCGG
AGGTATAAAGTATGCGATGTGCCCTTGGATCAACTGCCACGGTCGGAAAGCTTAAAGGATGTTCTGGAGA
GACTCCTTCCCTATTGGAATGAAAGGATTGCTCCCGAAGTATTACGTGGCAAAACCATTCTGATATCTGC
TCATGGAAATAGCAGTAGGGCACTCCTAAAACACCTGGAAGGTATCTCAGATGAAGACATCATCAACATT
ACTCTTCCTACTGGAGTCCCCATTCTTCTGGAATTGAGAAAACCTGCGTGCTGCTTTGGGCCTCATCAGT
TCCTGGGTGACCAAGAGGCGATCCAAGCAGCCATTAAGAAAAGTAGAAGATCAAGGAAAACCAGC
TAAAAAATAG

Restriction Sites: Sgfl-Mlul

**ACCN:** NM 001293085

**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).





Cytogenetics:

**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: <u>NM 001293085.1</u>, <u>NP 001280014.1</u>

7q33

RefSeq Size: 1925 bp
RefSeq ORF: 780 bp
Locus ID: 669
UniProt ID: P07738

Protein Families: Druggable Genome

**Protein Pathways:** Glycolysis / Gluconeogenesis, Metabolic pathways

**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 (3) differs in the 5' UTR, compared to variant 2. Variants 1, 2,

and 3 encode the same protein.