

**BPGM Antibody (C-term) Blocking peptide**  
Synthetic peptide  
Catalog # BP12615b

**Specification**

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**BPGM Antibody (C-term) Blocking peptide - Product Information**

Primary Accession [P07738](#)

**BPGM Antibody (C-term) Blocking peptide - Additional Information**

Gene ID 669

**Other Names**

Bisphosphoglycerate mutase, BPGM, 3-bisphosphoglycerate mutase, erythrocyte, 3-bisphosphoglycerate synthase, 3-diphosphoglycerate mutase, DPGM, BPG-dependent PGAM, BPGM

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**BPGM Antibody (C-term) Blocking peptide - Protein Information**

Name BPGM

**Function**

Plays a major role in regulating hemoglobin oxygen affinity by controlling the levels of its allosteric effector 2,3- bisphosphoglycerate (2,3-BPG). Also exhibits mutase (EC 5.4.2.11) activity.

**Tissue Location**

Expressed in red blood cells. Expressed in non- erythroid cells of the placenta; present in the syncytiotrophoblast layer of the placental villi at the fetomaternal interface (at protein level).

**BPGM Antibody (C-term) Blocking peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

**BPGM Antibody (C-term) Blocking peptide - Images**

### **BPGM Antibody (C-term) Blocking peptide - Background**

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.

### **BPGM Antibody (C-term) Blocking peptide - References**

Lamesch, P., et al. Genomics 89(3):307-315(2007) Wang, Y., et al. J. Biol. Chem. 281(51):39642-39648(2006) Wang, Y., et al. J. Biol. Chem. 279(37):39132-39138(2004) Fujita, T., et al. J. Biochem. 124(6):1237-1244(1998) Fujita, T., et al. J. Biochem. 124(6):1237-1244(1998)