10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

BPGM Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP12615b

Product Information

Application	WB, E
Primary Accession	P07738
Other Accession	Q4R6L7, NP_954655.1, NP_001715.1
Reactivity	Human, Mouse
Predicted	Monkey, Bovine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32095
Calculated MW	30005
Antigen Region	230-259

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
Target/Specificity	This BPGM antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 230-259 amino acids from the C-terminal region of human BPGM.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	BPGM Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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 feto-maternal interface (at protein level).

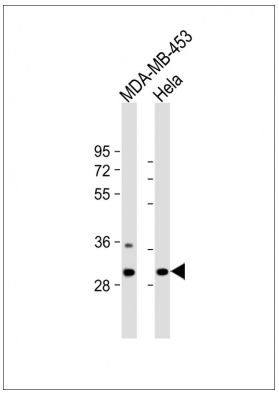
Background

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.

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)
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Images



All lanes : Anti-BPGM Antibody (C-term) at 1:2000 dilution Lane 1: MDA-MB-453 whole cell lysate Lane 2: Hela whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 30 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.