

BPGM Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12615b

Specification

BPGM Antibody (C-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB,E <u>P07738</u> <u>O4R6L7</u>, <u>NP_954655.1</u>, <u>NP_001715.1</u> Human Monkey Rabbit Polyclonal Rabbit IgG 30005 230-259

BPGM Antibody (C-term) - 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~~1:2000

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.

BPGM Antibody (C-term) - 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).

BPGM Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

BPGM Antibody (C-term) - 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 μ g per lane. Secondary Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 30 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

BPGM Antibody (C-term) - 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) - 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)