

**GPI Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP9786b****Specification**

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**GPI Antibody (C-term) - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, FC,E               |
| Primary Accession | <a href="#">P06744</a> |
| Other Accession   | <a href="#">Q4R591</a> |
| Reactivity        | Human, Mouse           |
| Predicted         | Monkey                 |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |
| Isotype           | Rabbit IgG             |
| Antigen Region    | 445-473                |

**GPI Antibody (C-term) - Additional Information****Gene ID** 2821**Other Names**

Glucose-6-phosphate isomerase, GPI, Autocrine motility factor, AMF, Neuroleukin, NLK, Phosphoglucose isomerase, PGI, Phosphohexose isomerase, PHI, Sperm antigen 36, SA-36, GPI

**Target/Specificity**

This GPI antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 445-473 amino acids from the C-terminal region of human GPI.

**Dilution**

WB~~1:1000  
FC~~1:10~50

**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**

GPI Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**GPI Antibody (C-term) - Protein Information****Name** GPI {ECO:0000303|PubMed:2387591, ECO:0000312|HGNC:HGNC:4458}

**Function** In the cytoplasm, catalyzes the conversion of glucose-6- phosphate to fructose-6-phosphate, the second step in glycolysis, and the reverse reaction during gluconeogenesis (PubMed:[28803808](#)). Besides it's role as a glycolytic enzyme, also acts as a secreted cytokine: acts as an angiogenic factor (AMF) that stimulates endothelial cell motility (PubMed:[11437381](#)). Acts as a neurotrophic factor, neuroleukin, for spinal and sensory neurons (PubMed:[3352745](#), PubMed:[11004567](#)). It is secreted by lectin-stimulated T-cells and induces immunoglobulin secretion (PubMed:[3352745](#), PubMed:[11004567](#)).

#### Cellular Location

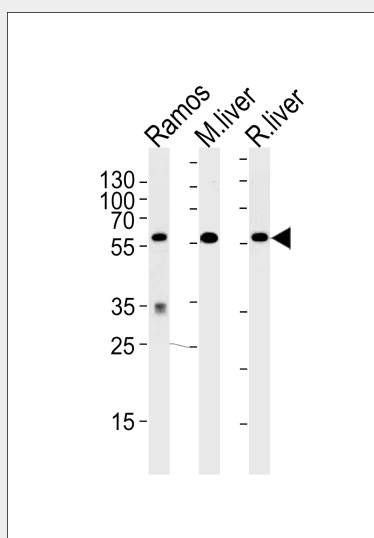
Cytoplasm. Secreted

#### GPI Antibody (C-term) - Protocols

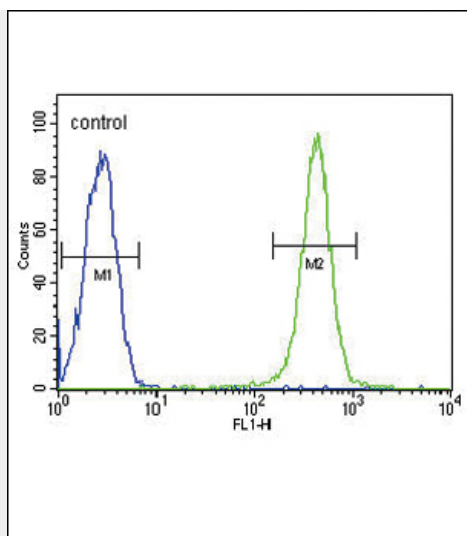
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### GPI Antibody (C-term) - Images



Western blot analysis of lysates from Ramos cell line, mouse liver, rat liver tissue (from left to right), using GPI Antibody (C-term) (Cat. #AP9786b). AP9786b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.



GPI Antibody (C-term) (Cat. #AP9786b) flow cytometric analysis of Ramos cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **GPI Antibody (C-term) - Background**

GPI belongs to the GPI family whose members encode multifunctional phosphoglucose isomerase proteins involved in energy pathways. The protein encoded by this gene is a dimeric enzyme that catalyzes the reversible isomerization of glucose-6-phosphate and fructose-6-phosphate. The protein functions in different capacities inside and outside the cell. In the cytoplasm, the gene product is involved in glycolysis and gluconeogenesis, while outside the cell it functions as a neurotrophic factor for spinal and sensory neurons. Defects in this gene are the cause of nonspherocytic hemolytic anemia and a severe enzyme deficiency can be associated with hydrops fetalis, immediate neonatal death and neurological impairment.

### **GPI Antibody (C-term) - References**

Shih, W.L., et al. Cancer Lett. 290(2):223-237(2010)  
Davila, S., et al. Genes Immun. 11(3):232-238(2010)  
Araki, K., et al. J. Biol. Chem. 284(47):32305-32311(2009)  
Tsutsumi, S., et al. Int. J. Oncol. 35(5):1117-1121(2009)  
Funasaka, T., et al. Cancer Res. 69(13):5349-5356(2009)  
Yanagawa, T., et al. J. Biol. Chem. 280(11):10419-10426(2005)  
Haga, A., et al. Biochim. Biophys. Acta 1480 (1-2), 235-244 (2000)

### **GPI Antibody (C-term) - Citations**

- [Evodiamine Induces Apoptosis and Inhibits Migration of HCT-116 Human Colorectal Cancer Cells.](#)
- [Enolase1 \(ENO1\) and glucose-6-phosphate isomerase \(GPI\) are good markers to predict human sperm freezability.](#)