

**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:[11004567](#), PubMed:[3352745](#)). It is secreted by lectin-stimulated T-cells and induces immunoglobulin secretion (PubMed:[11004567](#), PubMed:[3352745](#)).

#### Cellular Location

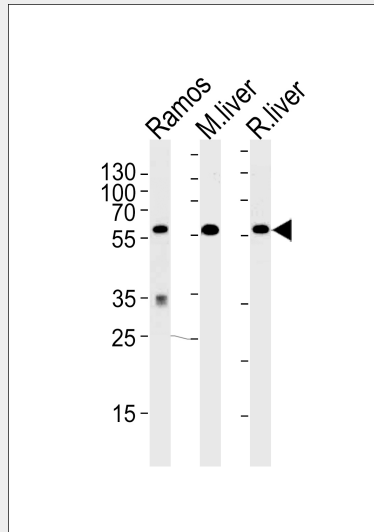
Cytoplasm. Secreted

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

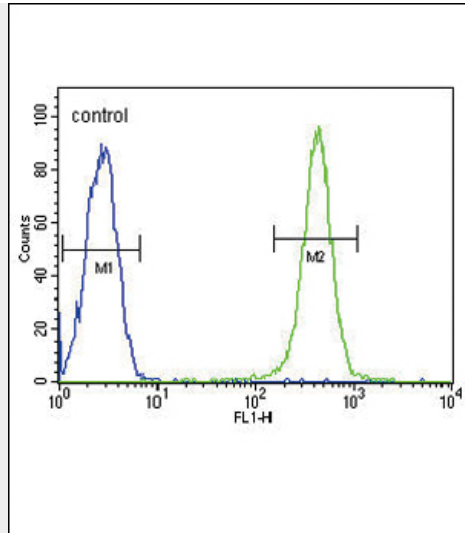
Provided below are standard protocols that you may find useful for product applications.

- [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.](#)