

**GPI Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5240**

**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, Rat
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	H=63,64;M=63;Rat=63 KDa
Isotype	Rabbit IgG
Antigen Source	HUMAN

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

**Gene ID** 2821

**Antigen Region**  
445-473

**Other Names**

GPI; Glucose-6-phosphate isomerase; Autocrine motility factor; Neuroleukin; Phosphoglucose isomerase; Phosphohexose isomerase; Sperm antigen 36

**Dilution**

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

**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.

**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:<a href="http://www.uniprot.org/citations/28803808" target="\_blank">28803808</a>). Besides its role as a glycolytic enzyme, also acts as a secreted cytokine: acts as an angiogenic factor (AMF) that stimulates endothelial cell motility (PubMed:<a href="http://www.uniprot.org/citations/11437381" target="\_blank">11437381</a>). Acts as a neurotrophic factor, neuroleukin, for spinal and sensory neurons (PubMed:<a href="http://www.uniprot.org/citations/11004567" target="\_blank">11004567</a>, PubMed:<a href="http://www.uniprot.org/citations/3352745" target="\_blank">3352745</a>). It is secreted by lectin-stimulated T-cells and induces immunoglobulin secretion (PubMed:<a href="http://www.uniprot.org/citations/11004567" target="\_blank">11004567</a>, PubMed:<a href="http://www.uniprot.org/citations/3352745" target="\_blank">3352745</a>).

### Cellular Location

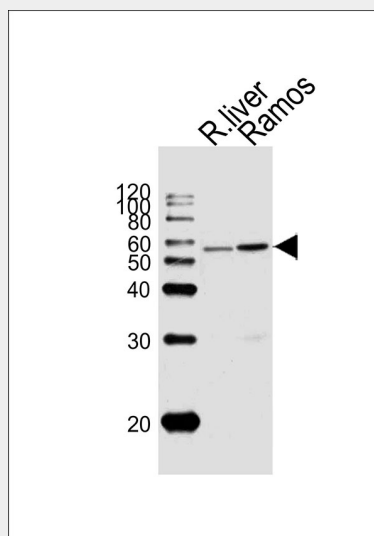
Cytoplasm. Secreted

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

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

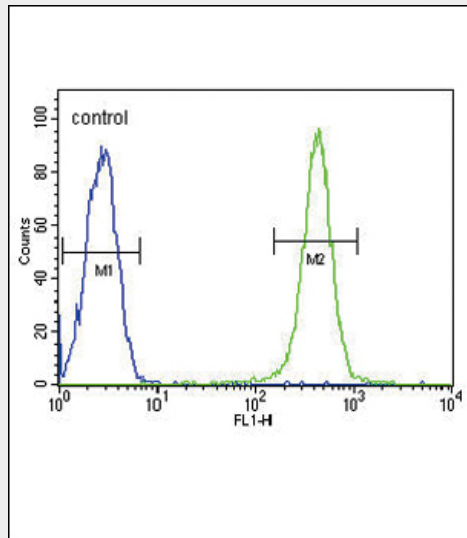
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

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



Western blot analysis of lysates from rat liver tissue lysate, Ramos cell line (from left to right), using GPI Antibody (C-term) (Cat. #AW5240). AW5240 was diluted at 1:1000 at each lane. A goat

anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.



GPI Antibody (C-term) (Cat. #AW5240) 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)