

**GPI Antibody (clone 4B11)**  
**Mouse Monoclonal Antibody**  
**Catalog # ALS16950****Specification**

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**GPI Antibody (clone 4B11) - Product Information**

Application	<b>WB, IHC-P, IF</b>
Primary Accession	<a href="#">P06744</a>
Other Accession	<a href="#">2821</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>63147</b>
Dilution	<b>WB~~1:1000</b> <b>IHC-P~~N/A</b> <b>IF~~1:50~200</b>

**GPI Antibody (clone 4B11) - Additional Information****Gene ID** 2821**Other Names**

GPI, AMF, Autocrine motility factor, Glucose phosphate isomerase, Hexose monophosphate isomerase, Hexosephosphate isomerase, Neuroleukin, Oxoisomerase, Phosphoglucose isomerase, Phosphohexomutase, Phosphohexose isomerase, SA36, PGI, SA-36, Glucose-6- ...

**Target/Specificity**

Human GPI

**Reconstitution & Storage**

PBS, pH 7.3, 1% BSA, 50% glycerol, 0.02% sodium azide. Store at -20°C. Minimize freezing and thawing.

**Precautions**

GPI Antibody (clone 4B11) is for research use only and not for use in diagnostic or therapeutic procedures.

**GPI Antibody (clone 4B11) - Protein Information****Name** GPI {ECO:0000303|PubMed:2387591, ECO:0000312|HGNC:HGNC:4458}**Function**

Isomerase that catalyzes the conversion of alpha-D-glucose-6- phosphate to beta-D-fructose-6-phosphate, the second step in glycolysis, and the reverse reaction in gluconeogenesis, within the cytoplasm (PubMed:<a href="http://www.uniprot.org/citations/28803808" target="\_blank">28803808</a>). Also shows C2-epimerase activity, interconverting D-glucose-6-phosphate (G6P) and D-mannose-6-phosphate

(M6P) (By similarity). Also displays anomerase activity, interconverting alpha and beta-anomeric forms of G6P, D-fructose-6- phosphate and M6P (By similarity). In addition to its metabolic role, this enzyme functions extracellularly as a cytokine: acts as autocrine motility factor (AMF), a secreted angiogenic factor that enhances endothelial cell motility (PubMed:<a href="http://www.uniprot.org/citations/11437381" target="\_blank">11437381</a>). Functions as neuroleukin, a neurotrophic factor supporting the survival of 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>). Released by lectin- stimulated T-cells to induce 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

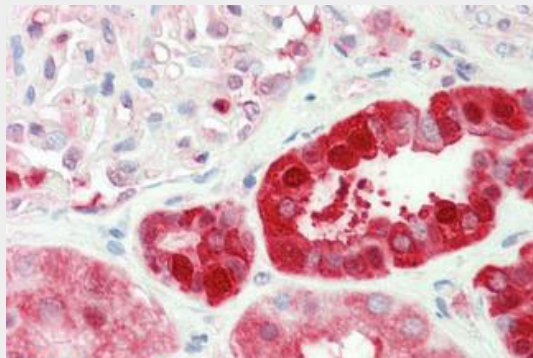
Cytoplasm. Secreted

#### GPI Antibody (clone 4B11) - Protocols

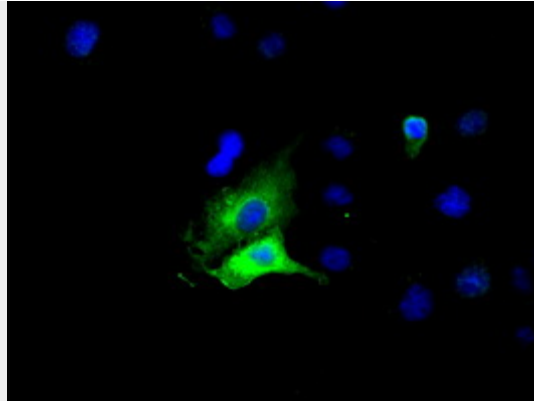
Provided below are standard protocols that you may find useful for product applications.

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

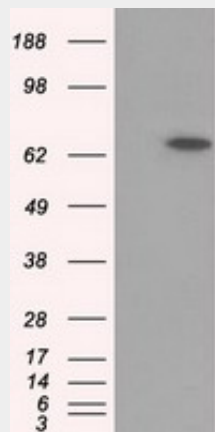
#### GPI Antibody (clone 4B11) - Images



Anti-GPI antibody IHC staining of human kidney.



Anti-GPI mouse monoclonal antibody immunofluorescent staining of COS7 cells transiently...



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY GPI...

### **GPI Antibody (clone 4B11) - Background**

Besides its role as a glycolytic enzyme, mammalian GPI can function as a tumor-secreted cytokine and an angiogenic factor (AMF) that stimulates endothelial cell motility. GPI is also a neurotrophic factor (Neuroleukin) for spinal and sensory neurons.

### **GPI Antibody (clone 4B11) - References**

- Gurney M.E., et al. Submitted (MAR-1987) to the EMBL/GenBank/DDBJ databases.
- Yakirevich E., et al. Biol. Reprod. 62:1016-1023(2000).
- Ota T., et al. Nat. Genet. 36:40-45(2004).
- Grimwood J., et al. Nature 428:529-535(2004).
- Walker J.I.H., et al. Genomics 7:638-643(1990).