



# GPI Monoclonal Antibody

<b>Catalog No</b>	YP-Ab-02328
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	GPI
<b>Protein Name</b>	Glucose-6-phosphate isomerase
<b>Immunogen</b>	Purified recombinant fragment of human GPI expressed in E. Coli.
<b>Specificity</b>	GPI Monoclonal Antibody detects endogenous levels of GPI protein.
<b>Formulation</b>	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	Affinity purification
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/200 - 1/1000. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/10000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	GPI; Glucose-6-phosphate isomerase; GPI; Autocrine motility factor; AMF; Neuroleukin; NLK; Phosphoglucose isomerase; PGI; Phosphohexose isomerase; PHI; Sperm antigen 36; SA-36
<b>Observed Band</b>	
<b>Cell Pathway</b>	Cytoplasm . Secreted .
<b>Tissue Specificity</b>	B-cell lymphoma,Brain,Skin,Spleen,Testis,
<b>Function</b>	catalytic activity:D-glucose 6-phosphate = D-fructose 6-phosphate.,disease:Defects in GPI are a cause of hereditary nonspherocytic hemolytic anemia (HA) [MIM:172400]. Severe GPI deficiency can be associated with hydrops fetalis, immediate neonatal death and neurological impairment.,function:Besides it's 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.,online information:Phosphoglucose isomerase entry,online information:The Singapore human mutation and polymorphism database,pathway:Carbohydrate degradation; glycolysis; D-glyceraldehyde 3-phosphate and glycerone phosphate from D-glucose: step 2/4.,PTM:Phosphorylation at Ser-185 by CK2 has been shown to decrease enzymatic activity and may contribute to s

**Background**

This gene encodes a member of the glucose phosphate isomerase protein family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. In the cytoplasm, the gene product functions as a glycolytic enzyme (glucose-6-phosphate isomerase) that interconverts glucose-6-phosphate and fructose-6-phosphate. Extracellularly, the encoded protein (also referred to as neuroleukin) functions as a neurotrophic factor that promotes survival of skeletal motor neurons and sensory neurons, and as a lymphokine that induces immunoglobulin secretion. The encoded protein is also referred to as autocrine motility factor based on an additional function as a tumor-secreted cytokine and angiogenic factor. Defects in this gene are the cause of nonspherocytic hemolytic anemia and a severe enzyme deficiency can be associated with hydrops fetalis

**matters needing attention**

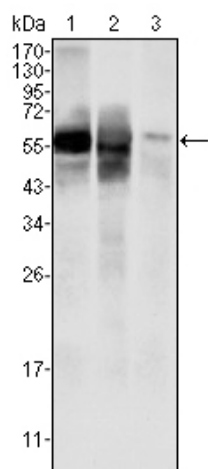
Avoid repeated freezing and thawing!

**Usage suggestions**

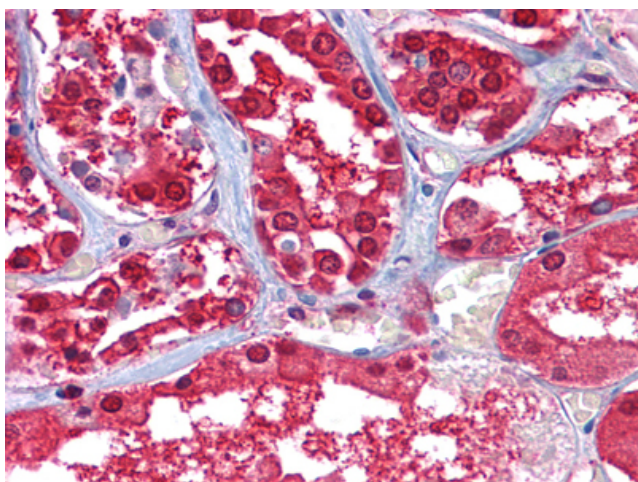
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



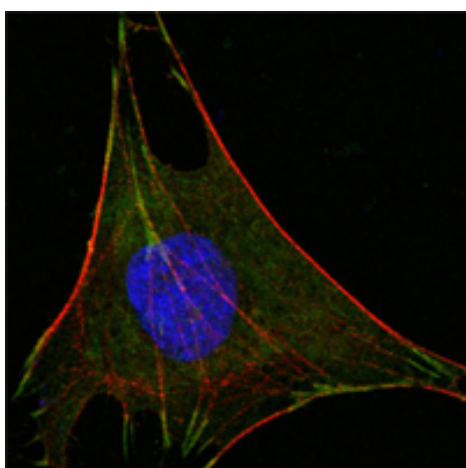
## Products Images



Western Blot analysis using GPI Monoclonal Antibody against HepG2 (1), SMMC-7721 (2) cell lysate and rat liver tissues lysate (3).



Immunohistochemistry analysis of paraffin-embedded human Kidney tissues with AEC staining using GPI Monoclonal Antibody.



Confocal immunofluorescence analysis of L-02 cells using GPI Monoclonal Antibody (green). Red: Actin filaments have been labeled with DY-554 phalloidin. Blue: DRAQ5 fluorescent DNA dye.