



Rabbit Anti-GPI antibody

SL10419R

Product Name:	GPI
Chinese Name:	糖磷脂酰肌醇抗体
Alias:	Glucose 6 phosphate isomerase; AMF; Autocrine motility factor; Autocrine motility factor; DKFZp686C13233; EC 5.3.1.9; G6PI_HUMAN; Glucose phosphate isomerase; Glucose-6-phosphate isomerase; GNPI; GPI; Gpi1; Hexose monophosphate isomerase; Hexosephosphate isomerase; Neuroleukin; NLK; Oxoisomerase; PHI; Phosphoglucose isomerase; Phosphohexomutase; Phosphohexose isomerase; Phosphosaccharomutase; SA 36; SA-36; SA36; Sperm antigen 36.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	63kDa
Cellular localization:	The nucleusSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Glucose 6 phosphate isomerase:401-500/558
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	This gene 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. [provided by RefSeq, Jul 2008].

Function:

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.

Subunit:

Homodimer in the catalytically active form, monomer in the secreted form.

Subcellular Location:

Cytoplasm. Secreted.

Post-translational modifications:

Phosphorylation at Ser-185 by CK2 has been shown to decrease enzymatic activity and may contribute to secretion by a non-classical secretory pathway. ISGylated.

DISEASE:

Defects in GPI are the cause of hemolytic anemia non-spherocytic due to glucose phosphate isomerase deficiency (HA-GPID) [MIM:613470]. It is a form of anemia in which there is no abnormal hemoglobin or spherocytosis. It is caused by glucose phosphate isomerase deficiency. Severe GPI deficiency can be associated with hydrops fetalis, immediate neonatal death and neurological impairment.

Similarity:

Belongs to the GPI family.

SWISS:

P06744

Gene ID:

2821

Database links:

[Entrez Gene: 2821](#) Human

[Entrez Gene: 14751](#)Mouse

[Omin: 172400](#)Human

[SwissProt: P06744](#)Human

[SwissProt: P06745](#)Mouse

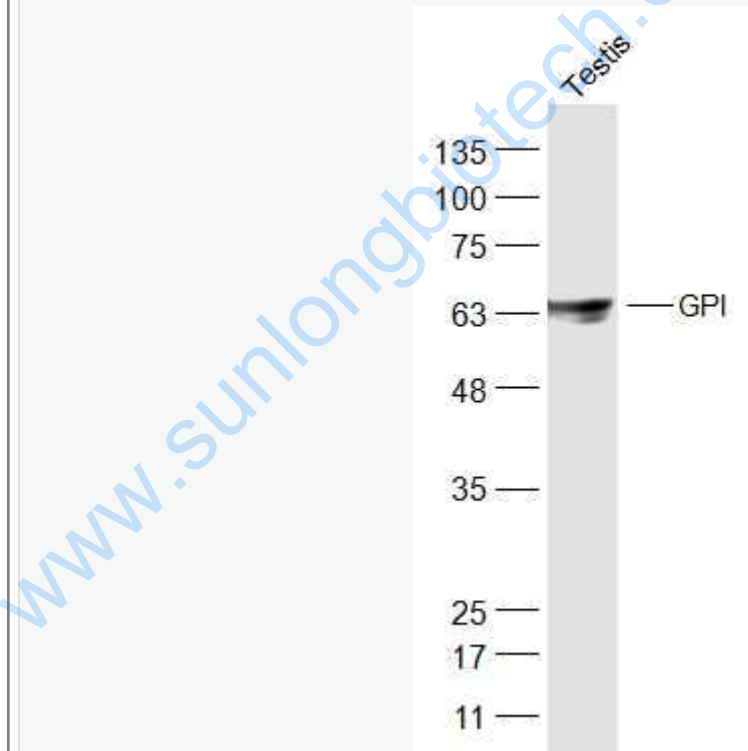
[Unigene: 466471](#)Human

[Unigene: 589](#)Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

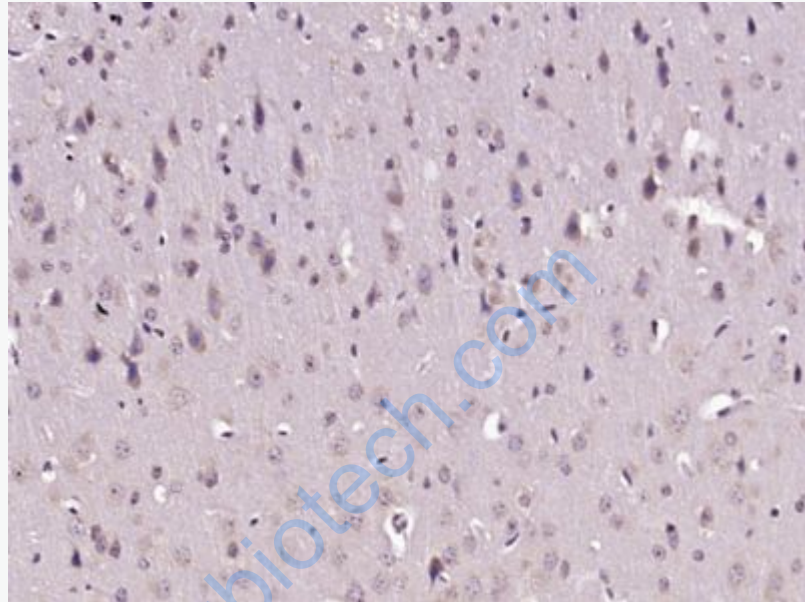
Testis (Mouse) Lysate at 40 ug

Primary: Anti-GPI (SL10419R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 64 kD

Observed band size: 64 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GPI) Polyclonal Antibody, Unconjugated (SL10419R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.