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

Specification

GPI Antibody (C-term) - Product Information

Application	**WB, FC,E**
Primary Accession	P06744
Other Accession	Q4R591
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: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).

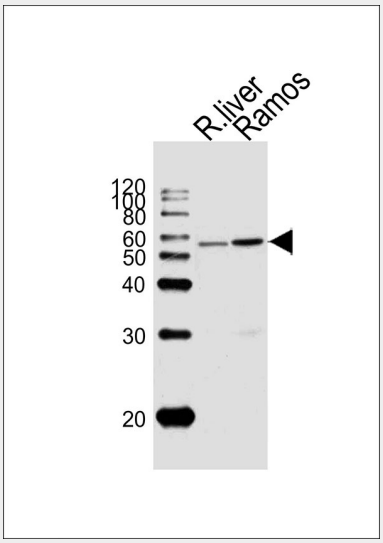
Cellular Location
Cytoplasm. Secreted

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 Cytomety
- 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

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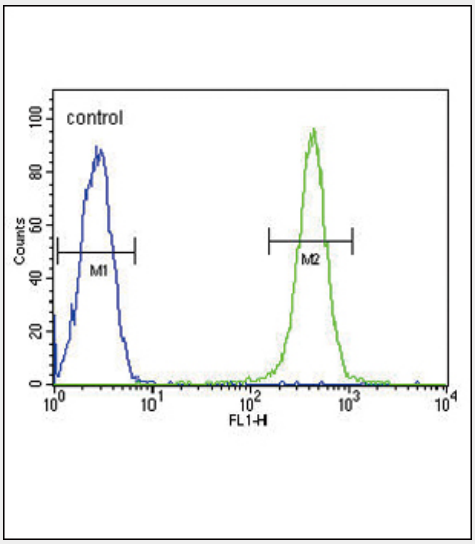
anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.



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)