10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Mouse Gpi Antibody(C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5542

Product Information

Application	WB
Primary Accession	P06745
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	62767
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	14751
Antigen Region	532-558
Other Names	Glucose-6-phosphate isomerase, GPI, Autocrine motility factor, AMF, Neuroleukin, NLK, Phosphoglucose isomerase, PGI, Phosphohexose isomerase, PHI, Gpi, Gpi1
Dilution	WB~~1:1000
Target/Specificity	This Mouse Gpi antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 532-558 amino acids from the C-terminal region of mouse 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	Mouse Gpi Antibody(C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Gpi {ECO:0000303|PubMed:7545951}
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:2344351, PubMed:7277315, PubMed:8417789). 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 (By similarity). Functions as neuroleukin, a neurotrophic factor supporting the survival of spinal and sensory neurons (PubMed:3352745, PubMed:3764429). Released by lectin-stimulated T-cells to induce immunoglobulin secretion (PubMed:3352745).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:P06744}. Secreted {ECO:0000250|UniProtKB:P06744}

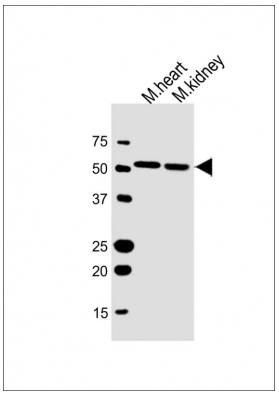
Background

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.

References

Benveniste, P., et al. Cell Stem Cell 6(1):48-58(2010)
Repiso, A., et al. Anat Histol Embryol 37(5):380-382(2008)
Szuber, N., et al. Exp. Hematol. 36(7):773-785(2008)
Chandele, A., et al. J. Immunol. 180(8):5309-5319(2008)
Cuda, C.M., et al. J. Immunol. 179(11):7439-7447(2007)

Images



All lanes : Anti-Gpi Antibody (C-term) at 1:1000 dilution Lane 1: mouse heart lysate Lane 2: mouse kidney lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 63 kDa Blocking/Dilution buffer: 5% NFDM/TBST.