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Mouse Gpi Antibody(C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19643b

Product Information

Application	WB, E
Primary Accession	P06745
Other Accession	NP_032181.2
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB40723
Calculated MW	62767
Antigen Region	532-558

Additional Information

Gene ID	14751
Other Names	Glucose-6-phosphate isomerase, GPI, Autocrine motility factor, AMF, Neuroleukin, NLK, Phosphoglucose isomerase, PGI, Phosphohexose isomerase, PHI, Gpi, Gpi1
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.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
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}

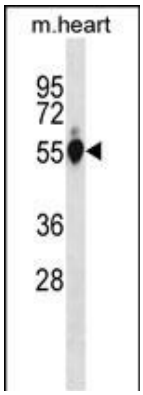
Background

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



Mouse Gpi Antibody (C-term) (Cat. #AP19643b) western blot analysis in mouse heart tissue lysates (35ug/lane).This demonstrates the Mouse Gpi antibody detected the Mouse Gpi protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.