

Glucose 6 phosphate isomerase Antibody

Rabbit mAb

Catalog # AP91708

Product Information

Application	WB, IHC, IF, FC, ICC, IHF
Primary Accession	P06744
Reactivity	Human
Clonality	Monoclonal
Other Names	AMF; NLK; PGI; PHI; GNPI; SA-36; GPI;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	63147

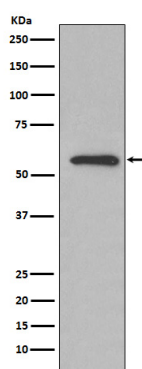
Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 FC 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human Glucose 6 phosphate isomerase
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	GPI {ECO:0000303 PubMed:2387591, ECO:0000312 HGNC:HGNC:4458}
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: 28803808). 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 (PubMed: 11437381). Functions as neuroleukin, a neurotrophic factor supporting the survival of spinal and sensory neurons (PubMed: 11004567 , PubMed: 3352745). Released by lectin- stimulated T-cells to induce immunoglobulin secretion (PubMed: 11004567 , PubMed: 3352745).
Cellular Location	Cytoplasm. Secreted

Images



Western blot analysis of Glucose 6 phosphate isomerase expression in HeLa cell lysate.

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