GPI Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	GPI, Polyclonal Antibody
Full Product Name	GPI (Glucose-6-phosphate Isomerase, Autocrine Motility Factor, AMF, Neuroleukin, NLK, Phosphoglucose Isomerase, Phosphohexose Isomerase, PH
Product Gene Name	anti-GPI antibody
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human, Mouse
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with MaxLight550.
Purity/Purification	Purified by Protein A Affinity Chromatography.
Specificity	Recognizes human GPI. Species Crossreactivity: mouse.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amo
Molecular Weight	64,325 Da
OMIM	gene 613470
3D Structure	ModBase 3D Structure for P06744
Immunogen	Full length human GPI, aa1-558 (NP_000166.2).
Immunogen Sequence	MAALTRDPQFQKLQQWYREHRSELNLRRLFDANKDRFNHFSLTLNTNHGHILVDYSKNLVTEDVMRMLVDLAKSRGVEAARERMFNGEKINYTEGRAVL
Conjugate	MaxLight550
Note	Preservative Free
Product Categories/Family for anti-GPI antibody	Antibodies; Enzymes; Isomerase
Applications Tested/Suitable for anti-GPI antibody	Western Blot (WB)
Application Notes for anti-GPI antibody	Applications are based on unconjugated antibody.
Related Product Information for anti-GPI antibody	This gene belongs to the GPI family whose members encode multifunctional phosphoglucose isomerase proteins involved in energy pathways. The pro
Other Notes	Small volumes of anti-GPI antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary

Searchable Terms for GPI purchase	MBS6380194 is an antibody targeting GPI. Also known as GPI (Glucose-6-phosphate Isomerase, Autocrine Motility Factor, AMF, Neuroleukin, NLK, PH

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for GPI. It may not necessarily be applicable to this product.

NCBI GI #	18201905
NCBI GeneID	2821
NCBI Accession #	NP_000166.2
UniProt Primary Accession #	P06744
UniProt Secondary Accession #	Q9BRD3; Q9BSK5; Q9UHE6; B4DG39
UniProt Related Accession #	P06744
GenBank Nucleotide #	NM_000175.2
NCBI Official Full Name	glucose-6-phosphate isomerase isoform 2
NCBI Official Synonym Full Names	glucose-6-phosphate isomerase
NCBI Official Symbol	GPI
NCBI Official Synonym Symbols	AMF; NLK; PGI; PHI; GNPI; SA36; SA-36
UniProt Protein Name	Glucose-6-phosphate isomerase
UniProt Synonym Protein Names	Autocrine motility factor; AMF; Neuroleukin; NLK; Phosphoglucose isomerase; PGI; Phosphohexose isomerase; PHI; Sperm antigen 36; SA-36
Protein Family	Glucose-6-phosphate isomerase
UniProt Gene Name	GPI
UniProt Synonym Gene Names	GPI; AMF; NLK; PGI; PHI; SA-36
UniProt Entry Name	G6PI_HUMAN
NCBI Protein Information	glucose-6-phosphate isomerase; autocrine motility factor; glucose phosphate isomerase; hexose monophosphate isomerase; hexosephosphate isomerase; neuroleukin; oxoisomerase; phosphoglucose isomerase; phosphohexomutase; phosphohexose isomerase; phosphosacch
NCBI Summary for GPI	This gene encodes a member of the glucose phosphate isomerase protein family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. In the cytoplasm, the gene product functions as a glycolytic enzyme (glucose-6-phosphate isomerase) that interconverts glucose-6-phophsate and fructose-6-phosphate. Extracellularly, the encoded protein (also referred to as neuroleukin) functions as a neurotrophic factor that promotes survival of skeletal motor neurons and sensory neurons, and as a lymphokine that induces immunoglobulin secretion. The encoded protein is also referred to as autocrine motility factor based on an additional function as a tumor-secreted cytokine and angiogenic factor. 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. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

UniProt Comments for GPI	G6PI: belongs to the GPI family whose members encode multifunctional phosphoglucose isomerase proteins involved in energy pathways. A dimeric enzyme that catalyzes the reversible isomerization of glucose-6-phosphate and fructose-6-phosphate. 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. Protein type: Isomerase; Carbohydrate Metabolism - starch and sucrose; Carbohydrate Metabolism - amino sugar and nucleotide sugar; EC 5.3.1.9; Carbohydrate Metabolism - glycolysis and gluconeogenesis; Cytokine; Carbohydrate Metabolism - pentose phosphate pathway; Apoptosis Chromosomal Location of Human Ortholog: 19q13.1 Cellular Component: nucleoplasm; extracellular space; neuron projection; membrane; cytoplasm; plasma membrane; cytosol Molecular Function: monosaccharide binding; glucose-6-phosphate isomerase activity; growth factor activity; cytokine activity; intramolecular transferase activity Biological Process: aldehyde catabolic process; methylglyoxal biosynthetic process; glycolysis; glucose 6-phosphate metabolic process; glucose metabolic process; pathogenesis; negative regulation of caspase activity; humoral immune response; gluconeogenesis; learning and/or memory; hemostasis; carbohydrate metabolic process; negative regulation of neuron apoptosis; angiogenesis Disease: Hemolytic Anemia, Nonspherocytic, Due To Glucose Phosphate Isomerase Deficiency
Research Articles on GPI	**1.** High GPI expression is associated with metastatic phenotype of breast cancer.
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