GPI Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	GPI, Polyclonal Antibody
Full Product Name	GPI, CT (GPI, Glucose-6-phosphate isomerase, Autocrine motility factor, Neuroleukin, Phosphoglucose isomerase, Phosphohexose isomerase, Sperm antigen 36) (MaxLight 650)
Product Gene Name	anti-GPI antibody
Product Synonym Names	GPI; Glucose-6-phosphate isomerase; Autocrine motility factor; Neuroleukin; Phosphoglucose isomerase; Phosphohexose isomerase; Sperm antigen 36
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 MaxLight650.
Purity/Purification	Purified by Protein A Affinity Chromatography.
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 amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: MaxLight650 conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	558
OMIM	gene 613470
3D Structure	ModBase 3D Structure for P06744
Immunogen	GPI antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 452~481 amino acids from the C-terminal region of human GPI.
Conjugate	MaxLight650
Note	Preservative Free
Product Categories/Family for anti-GPI antibody	Antibodies; Enzymes; Isomerase
Applications Tested/Suitable for anti-GPI antibody	Flow Cytometry (FC/FACS), FLISA, Western Blot (WB)
Application Notes for anti-GPI antibody	FC/FACS: 1:10-50 FLISA: 1:1,000 WB: 1:100-500 Applications are based on unconjugated antibody.
Related Product Information for anti-GPI antibody	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.

Product References and Citations for anti-GPI antibody	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).
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, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for GPI purchase	MBS6303554 is an antibody targeting GPI. Also known as GPI, CT (GPI, Glucose-6-phosphate isomerase, Autocrine motility factor, Neuroleukin, Phosphoglucose isomerase, Phosphohexose isomerase, Sperm antigen 36) (MaxLight 650). Reactive in Human, Mouse. Host: Rabbit.

ADDITIONAL DETAILS

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

NCBI GI #	17380385
NCBI GeneID	2821
NCBI Accession #	P06744.4
UniProt Primary Accession #	P06744
UniProt Secondary Accession #	Q9BRD3; Q9BSK5; Q9UHE6; B4DG39
UniProt Related Accession #	P06744
NCBI Official Full Name	Glucose-6-phosphate isomerase
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; neuroleukin; oxoisomerase; sperm antigen 36; sperm antigen-36; phosphohexomutase; phosphosaccharomutase; phosphohexose isomerase; phosphoglucose isomerase; autocrine motility factor; hexosephosphate isomerase; glucose phosph
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.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/polyclonal-human-mouse-antibody/gpi/6303554