



Human GPI peptide (DAG-P1579)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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-phosphate 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]
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Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the GPI family.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	GPI glucose-6-phosphate isomerase [Homo sapiens (human)]
Official Symbol	GPI

Synonyms	GPI; glucose-6-phosphate isomerase; AMF; NLK; PGI; PHI; GNPI; SA36; SA-36; neuroleukin; oxoisomerase; sperm antigen 36; sperm antigen-36; phosphohexomutase; phosphosaccharomutase; phosphohexose isomerase; phosphoglucose isomerase; autocrine motility factor; hexosephosphate isomerase; glucose phosphate isomerase; hexose monophosphate isomerase;
Entrez Gene ID	2821
mRNA Refseq	NM_000175.3
Protein Refseq	NP_000166.2
UniProt ID	P06744
Chromosome Location	19q13.1
Pathway	Amino sugar and nucleotide sugar metabolism, organism-specific biosystem; Amino sugar and nucleotide sugar metabolism, conserved biosystem; Carbon metabolism, organism-specific biosystem; Carbon metabolism, conserved biosystem; Gluconeogenesis, organism-specific biosystem; Glucose metabolism, organism-specific biosystem; Glycolysis, organism-specific biosystem; Glycolysis (Embden-Meyerhof pathway), glucose => pyruvate, organism-specific biosystem; Glycolysis (Embden-Meyerhof pathway), glucose =>
Function	cytokine activity; glucose-6-phosphate isomerase activity; growth factor activity; intramolecular transferase activity; monosaccharide binding;