

Product datasheet for **AR09229PU-N**

Glucose-6-phosphate isomerase (GPI) (1-558, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Glucose-6-phosphate isomerase (GPI) (1-558, His-tag) human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH</u> <u>SSGLVPRGSH</u> MAALTRDPQF QKLQQWYREH RSELNLRRLF DANKDRFNHF SLTLNTNHGH ILVDYSKNLV TEDVMRMLVD LAKSRGVEAA RERMFNGEKI NYTEGRAVLH VALRNRSNTP ILVDGKDVMP EVNKVLDKMK SFCQRVRS GD WKGYTGTIT DVINIGIGGS DLGPLMVTEA LKPYSSGGPR VWYVSNIDGT HIAKTLAQLN PESSLFIAS KTFTTQETIT NAETAKEWFL QAAKDPSAVA KHFVALSTNT TKVKEFGIDP QNMFEFWDWV GGRYSLWSAI GLSIALHVGF DNFEQLLSGA HWMDQHFRTT PLEKNAPVLL ALLGIWYINC FGCETHAMLP YDQYLHRFAA YFQQGDMESN GKYITKSGTR VDHQTGPVW GEPGTNGQHA FYQLIQGTK MIPCDFLIPV QTQHPIRKGL HHKILLANFL AQTEALMRGK STEEARKELQ AAGKSPEDLE RLLPHKVFEG NRPTNSIVFT KLTPFMLGAL VAMYEHKIFV QGIIWDINSF DQWGVELGKQ LAKKIEPELD GSAQVTSHDA STNGLINFIK QQREARVQ
Tag:	His-tag
Predicted MW:	65.3 kDa
Concentration:	lot specific
Purity:	>95% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 10% glycerol
Bioactivity:	Biological: >90 units/mg and one unit will convert 1.0 μ M D-fructose 6-phosphat to D-glucose 6-phosphate per minute at pH 7.4 at 25°C.
Endotoxin:	< 1.0 EU per 1 μ g of protein (determined by LAL method)
Preparation:	Liquid purified protein
Protein Description:	Recombinant human GPI, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for 1-2 weeks or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.



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Stability:	Shelf life: one year from despatch.
RefSeq:	NP_000166
Locus ID:	2821
UniProt ID:	P06744
Cytogenetics:	19q13.11
Synonyms:	Phosphoglucose isomerase, PGI, Phosphohexose isomerase, PHI, Neuroleukin, NLK
Summary:	<p>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, Aug 2016]</p>
Protein Families:	Druggable Genome
Protein Pathways:	Amino sugar and nucleotide sugar metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways, Pentose phosphate pathway, Starch and sucrose metabolism

Product images: