

Product datasheet for **AR51987PU-S**

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 protein, 20 µg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MGSSHHHHHH SSGLVPRGSH MAALTRDPQF QKLQQWYREH RSELNLRRLF DANKDRFNHF SLTLNTNHGH ILVDYSKNLV TEDVMRMLVD LAKSRGVEAA RERMFNGEKI NYTEGRAVLH VALRNRSNTP ILVDGKDVMP EVNKVLDKMK SFCQVRVSGD WKGYTGTIT DVINIGIGGS DLGPLMVTEA LKPYSSGGPR VWYVSNIDGT HIAKTLAQLN PESSLFIAS KTFTTQETIT NAETAKEWFL QAAKDPSAVA KHVALSTNT TKVKEFGIDP QNMFEFWDWV GGRYSLWSAI GLSIALHVGF DNFEQLLSGA HWMQHFRTT PLEKNAPVLL ALLGIWYINC FGCETHAMLP YDQYLHRFAA YFQQGDMESN GKYITKSGTR VDHQTGPVW GEPGTNGQHA FYQLIQGTK MIPCDFLIPV QTQHPIRKGL HHKILLANFL AQTEALMRGK STEEARKELQ AAGKSPEDLE RLLPHKVFEG NRPTNSIVFT KLTPFMLGAL VAMYEHKIFV QGIIWDINSF DQWGVELGKQ LAKKIEPELD GSAQVTSHTA 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:	Specific: Specific activity is > 400 units/mg obtained by measuring the increase of NADPH in absorbance at 340 nm resulting from the reduction of NADP. One unit will convert 1.0 umole of D-Fructose 6-phosphate to D-glucose 6-phosphate per minute at pH 7.4 at 37C.
Endotoxin:	< 1.0 EU per 1 microgram of protein (determined by LAL method)
Preparation:	Liquid purified protein
Storage:	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.



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RefSeq: [NP_000166](#)

Locus ID: 2821

UniProt ID: [P06744](#)

Cytogenetics: 19q13.11

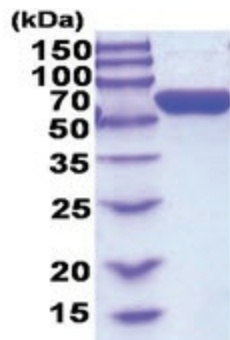
Synonyms: AMF; GNPI; NLK; PGI; PHI; SA-36; SA36

Summary: 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]

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:



15% SDS-PAGE (3ug)