

## Product datasheet for **TP301232M**

### Glucose 6 phosphate isomerase (GPI) (NM\_000175) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human glucose phosphate isomerase (GPI), 100 µg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA Clone or AA Sequence:** >RC201232 protein sequence  
**Red**=Cloning site **Green**=Tags(s)

MAALTRDPQFQKLQQWYREHRSELNLRRLFDANKDRFNHFSLTNTNHGHILVDYSKNLVTEDVMRMLVD  
LAKSRGVEAARERMFNGEKINYTEGRAVLHVALNRNNTPIVDGKDVMPVENKVLDMKSFQVRVSGD  
WKGYTGKTITDVINIGIGGSDLGPLMVTEALKPYSSGGPRVWVYVSNIDGTHIAKTLAQLNPESSLFIIAS  
KTFTTQETITNAETAKEWFLQAAKDPSAVAKHFVALSTNTTKVKEFGIDPQNMFEFWDWVGGRYSLWSAI  
GLSIALHVGFDFNFEQLLSGAHWMDQHFRTPLEKNAPVLLALLGIWYINCFGCETHAMLPYDQYLHRFAA  
YFQQGDMESNGKYITKSGTRVDHQTGPIVWGEPGTNGQHAFYQLIHQGTKMIPCDFLIPVQTQHPIRKGL  
HHKILLANFLAQTEALMRGKSTEEARKELQAAGKSPEDLERLLPHKVFEGNRPTNSIVFTKLTFFMLGAL  
VAMYEHKIFVQGIWDINSFDQWGVELGKQLAKKIEPELDGSAQVTSHDASTNGLINFIKQQREARVQ

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Tag:** C-Myc/DDK

**Predicted MW:** 63 kDa

**Concentration:** >0.05 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.

**Storage:** Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.



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RefSeq: [NP\\_000166](#)

Locus ID: 2821

UniProt ID: [P06744](#)

RefSeq Size: 4212

Cytogenetics: 19q13.11

RefSeq ORF: 1674

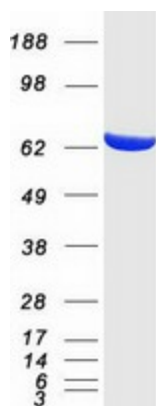
Synonyms: AMF; GNPI; NLK; PGI; PHI; SA-36; SA36

**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:



Coomassie blue staining of purified GPI protein (Cat# [TP301232]). The protein was produced from HEK293T cells transfected with GPI cDNA clone (Cat# [RC201232]) using MegaTran 2.0 (Cat# [TT210002]).