

## Product datasheet for **SC336929**

### Glucose 6 phosphate isomerase (GPI) (NM\_001289789) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Glucose 6 phosphate isomerase (GPI) (NM_001289789) Human Untagged Clone
Tag:	Tag Free
Symbol:	GPI
Synonyms:	AMF; GNPI; NLK; PGI; PHI; SA-36; SA36
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



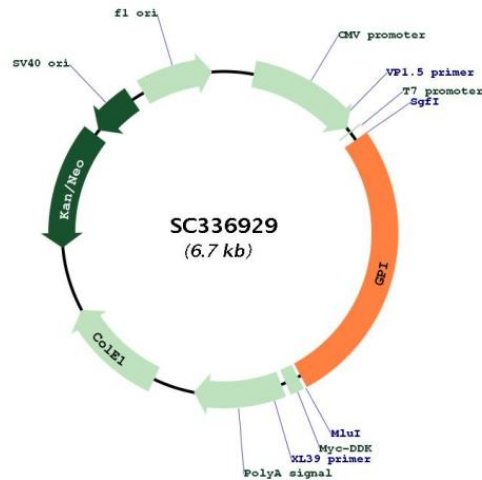
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Fully Sequenced ORF: >SC336929 representing NM\_001289789.  
Blue=Insert sequence Red=Cloning site Green=Tag(s)

```
GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGTAGCTCTCTGCAGCCTCCAACACCTGGGCTCCAGTGATCCCCGGGCTCTGCCACCCTCCCCACT
GCCACTTCGGGCAGAGGCCAGCAAAGCGGGCGCAAGAGTCCGCCATGGCCGCTCTCACCCGGGAC
CCCCAGTTCAGAACTGCAGCAATGGTACCGCGAGCACCGCTCCGAGCTGAACCTGCGCCGCTCTTC
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GCCCGAAAGGAGCTCCAGGCTGCGGGCAAGAGTCCAGAGGACCTTGAGAGGCTGCTGCCACATAAGGTC
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GTCGCCATGTATGAGCACAAGATCTTCTGTTCCAGGGCATCATCTGGGACATCAACAGCTTTGACCAGTGG
GGAGTGGAGCTGGGAAAGCAGCTGGCTAAGAAAATAGAGCCTGAGCTTGATGGCAGTGTCAAGTGACC
TCTCACGACGCTTCTACCAATGGGCTCATCAACTTCATCAAGCAGCAGCGGAGGCCAGAGTCCAAATAA
```

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT  
TACAAGGATGACGACGATAAGGTTAAACGGCCGGC

Restriction Sites: SgfI-MluI

**Plasmid Map:**


**ACCN:** NM\_001289789

**Insert Size:** 1794 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_001289789.1](#)

**RefSeq Size:** 4356 bp

**RefSeq ORF:** 1794 bp

**Locus ID:** 2821

**Cytogenetics:** 19q13.11

**Protein Families:** Druggable Genome

**Protein Pathways:** Amino sugar and nucleotide sugar metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways, Pentose phosphate pathway, Starch and sucrose metabolism

**MW:** 67.3 kDa

**Gene 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]  
Transcript Variant: This variant (3) represents the longest transcript and encodes the longest isoform (3).