

Product datasheet for **TR312678**

Glucose 6 phosphate isomerase (GPI) Human shRNA Plasmid Kit (Locus ID 2821)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Glucose 6 phosphate isomerase (GPI) Human shRNA Plasmid Kit (Locus ID 2821)
Locus ID:	2821
Synonyms:	AMF; GNPI; NLK; PGI; PHI; SA-36; SA36
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	GPI - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 2821). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<u>NM_000175</u> , <u>NM_001184722</u> , <u>NM_001289789</u> , <u>NM_001289790</u> , <u>NM_001329909</u> , <u>NM_001329910</u> , <u>NM_001329911</u> , <u>NM_000175.1</u> , <u>NM_000175.2</u> , <u>NM_000175.3</u> , <u>NM_000175.4</u> , <u>NM_001184722.1</u> , <u>NM_001289790.1</u> , <u>NM_001289790.2</u> , <u>NM_001289789.1</u> , <u>BC004982</u> , <u>BC004982.1</u> , <u>BC006342</u> , <u>BM664761</u> , <u>NM_000175.5</u> , <u>NM_001289790.3</u>
UniProt ID:	<u>P06744</u>
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]



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- shRNA Design:** These shRNA constructs were designed against multiple splice variants at this gene locus. To be certain that your variant of interest is targeted, please contact techsupport@origene.com. If you need a special design or shRNA sequence, please utilize our [custom shRNA service](#).
- Performance Guaranteed:** OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.
- For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).