

Product datasheet for **TR306381**

BPGM Human shRNA Plasmid Kit (Locus ID 669)

Product data:

Product Type:	shRNA Plasmids
Product Name:	BPGM Human shRNA Plasmid Kit (Locus ID 669)
Locus ID:	669
Synonyms:	DPGM; ECTY8
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	BPGM - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 669). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001293085 , NM_001724 , NM_199186 , NM_199186.1 , NM_199186.2 , NM_001724.1 , NM_001724.2 , NM_001724.3 , NM_001724.4 , NM_001293085.1 , BC017050 , BC017050.1 , BM090687 , NM_001724.5
UniProt ID:	P07738
Summary:	2,3-diphosphoglycerate (2,3-DPG) is a small molecule found at high concentrations in red blood cells where it binds to and decreases the oxygen affinity of hemoglobin. This gene encodes a multifunctional enzyme that catalyzes 2,3-DPG synthesis via its synthetase activity, and 2,3-DPG degradation via its phosphatase activity. The enzyme also has phosphoglycerate phosphomutase activity. Deficiency of this enzyme increases the affinity of cells for oxygen. Mutations in this gene result in hemolytic anemia. Multiple alternatively spliced variants, encoding the same protein, have been identified. [provided by RefSeq, Sep 2009]
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 .



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**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).