

## Product datasheet for **TL312877**

### Glucose 6 Phosphate Dehydrogenase (G6PD) Human shRNA Plasmid Kit (Locus ID 2539)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Glucose 6 Phosphate Dehydrogenase (G6PD) Human shRNA Plasmid Kit (Locus ID 2539)
Locus ID:	2539
Synonyms:	G6PD1
Vector:	pGFP-C-shLenti (TR30023)
E. coli Selection:	Chloramphenicol (34 ug/ml)
Mammalian Cell Selection:	Puromycin
Format:	Lentiviral plasmids
Components:	G6PD - Human, 4 unique 29mer shRNA constructs in lentiviral GFP vector(Gene ID = 2539). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pGFP-C-shLenti Vector, TR30021, included for free.
RefSeq:	<a href="#">NM_000402</a> , <a href="#">NM_001042351</a> , <a href="#">NM_001360016</a> , <a href="#">NM_001042351.1</a> , <a href="#">NM_001042351.2</a> , <a href="#">NM_000402.1</a> , <a href="#">NM_000402.2</a> , <a href="#">NM_000402.3</a> , <a href="#">NM_000402.4</a> , <a href="#">BC000337</a> , <a href="#">BC000337.2</a> , <a href="#">NM_001042351.3</a>
UniProt ID:	<a href="#">P11413</a>
Summary:	This gene encodes glucose-6-phosphate dehydrogenase. This protein is a cytosolic enzyme encoded by a housekeeping X-linked gene whose main function is to produce NADPH, a key electron donor in the defense against oxidizing agents and in reductive biosynthetic reactions. G6PD is remarkable for its genetic diversity. Many variants of G6PD, mostly produced from missense mutations, have been described with wide ranging levels of enzyme activity and associated clinical symptoms. G6PD deficiency may cause neonatal jaundice, acute hemolysis, or severe chronic non-spherocytic hemolytic anemia. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .



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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](mailto: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).