

## Product datasheet for **TR500745**

### G6pc2 Mouse shRNA Plasmid (Locus ID 14378)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	G6pc2 Mouse shRNA Plasmid (Locus ID 14378)
Locus ID:	14378
Synonyms:	G6pc; G6pc-rs; I; IGRP
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	G6pc2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 14378). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001289856</a> , <a href="#">NM_001289857</a> , <a href="#">NM_021331</a> , <a href="#">NM_021331.1</a> , <a href="#">NM_021331.2</a> , <a href="#">NM_021331.3</a> , <a href="#">NM_021331.4</a> , <a href="#">NM_001289857.1</a> , <a href="#">NM_001289856.1</a> , <a href="#">BC111905</a> , <a href="#">BC141558</a> , <a href="#">BC148698</a>
UniProt ID:	<a href="#">Q9Z186</a>
Summary:	This gene encodes an enzyme that belongs to the glucose-6-phosphatase catalytic subunit family. Members of this family catalyze the hydrolysis of glucose-6-phosphate, the terminal step in gluconeogenic and glycogenolytic pathways, to release glucose into the bloodstream. The family member encoded by this gene is found specifically in pancreatic islets but has not been shown to have phosphotransferase or phosphatase activity exhibited by a similar liver enzyme. The non-obese diabetic (NOD) mouse is a model for human type 1 diabetes, an autoimmune disease in which T lymphocytes attack and destroy insulin-producing pancreatic beta cells. In NOD mice, the protein encoded by this gene is a major target of cell-mediated autoimmunity. Variations in the human and mouse genes are associated with lower fasting plasma glucose levels. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]
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).