

## Product datasheet for **TR500803**

### Ggt1 Mouse shRNA Plasmid (Locus ID 14598)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Ggt1 Mouse shRNA Plasmid (Locus ID 14598)
Locus ID:	14598
Synonyms:	CD224; dwg; GGT; GGT-1; GGT 1; Ggtp
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Ggt1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 14598). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC012969</a> , <a href="#">NM_008116</a> , <a href="#">NM_008116.1</a> , <a href="#">NM_008116.2</a> , <a href="#">NM_008116.3</a>
UniProt ID:	<a href="#">Q60928</a>
Summary:	This gene encodes gamma-glutamyl transpeptidase, a plasmamembrane-associated enzyme that cleaves the peptide bond between gamma-glutamyl and cysteinyl glycine moieties of glutathione. The encoded protein is autocatalytically processed to generate an enzymatically active heterodimer comprised of heavy and light chains. Mice lacking the encoded protein grow slowly, develop cataracts and have elevated levels of glutathione in plasma and urine. Transgenic overexpression of the encoded protein in mice enhances osteoclastic bone resorption. The mutant alleles termed 'Dwarf grey' and 'Dwarf grey Bayer' in mice are associated with deletions in this gene. A gamma-glutamyl transpeptidase paralog is located adjacent to this gene. Alternative splicing results in multiple transcript variants. Additional transcripts using alternate promoters and differing in 5' UTRs have been described. [provided by RefSeq, Apr 2015]
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).