

## Product datasheet for **TR303266**

### Microsomal Glutathione S transferase 1 (MGST1) Human shRNA Plasmid Kit (Locus ID 4257)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Microsomal Glutathione S transferase 1 (MGST1) Human shRNA Plasmid Kit (Locus ID 4257)
Locus ID:	4257
Synonyms:	GST12; MGST; MGST-I
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	MGST1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 4257). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001260511</a> , <a href="#">NM_001260512</a> , <a href="#">NM_001267598</a> , <a href="#">NM_020300</a> , <a href="#">NM_145764</a> , <a href="#">NM_145791</a> , <a href="#">NM_145792</a> , <a href="#">NR_048545</a> , <a href="#">NR_048546</a> , <a href="#">NR_048547</a> , <a href="#">NM_020300.1</a> , <a href="#">NM_020300.2</a> , <a href="#">NM_020300.3</a> , <a href="#">NM_020300.4</a> , <a href="#">NM_145764.1</a> , <a href="#">NM_145764.2</a> , <a href="#">NM_145791.1</a> , <a href="#">NM_145791.2</a> , <a href="#">NM_145792.1</a> , <a href="#">NM_145792.2</a> , <a href="#">NM_001267598.1</a> , <a href="#">NM_001260512.1</a> , <a href="#">NM_001260511.1</a> , <a href="#">BC005923</a> , <a href="#">BC005923.1</a> , <a href="#">BC056863</a> , <a href="#">BC062473</a> , <a href="#">NM_001267598.2</a> , <a href="#">NM_020300.5</a>
UniProt ID:	<a href="#">P10620</a>
Summary:	The MAPEG (Membrane Associated Proteins in Eicosanoid and Glutathione metabolism) family consists of six human proteins, two of which are involved in the production of leukotrienes and prostaglandin E, important mediators of inflammation. Other family members, demonstrating glutathione S-transferase and peroxidase activities, are involved in cellular defense against toxic, carcinogenic, and pharmacologically active electrophilic compounds. This gene encodes a protein that catalyzes the conjugation of glutathione to electrophiles and the reduction of lipid hydroperoxides. This protein is localized to the endoplasmic reticulum and outer mitochondrial membrane where it is thought to protect these membranes from oxidative stress. Several transcript variants, some non-protein coding and some protein coding, have been found for this gene. [provided by RefSeq, May 2012]



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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](mailto: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](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).