

## Product datasheet for **TR309843**

### RGR Human shRNA Plasmid Kit (Locus ID 5995)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	RGR Human shRNA Plasmid Kit (Locus ID 5995)
Locus ID:	5995
Synonyms:	RP44
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	RGR - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 5995). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC008094</a> , <a href="#">NM_001012720</a> , <a href="#">NM_001012722</a> , <a href="#">NM_002921</a> , <a href="#">NM_002921.1</a> , <a href="#">NM_002921.2</a> , <a href="#">NM_002921.3</a> , <a href="#">NM_001012720.1</a> , <a href="#">NM_001012722.1</a> , <a href="#">BC008094.1</a> , <a href="#">BC011349</a> , <a href="#">BC011349.1</a> , <a href="#">BC027987</a> , <a href="#">BC042536</a> , <a href="#">NM_001012720.2</a>
UniProt ID:	<a href="#">P47804</a>
Summary:	This gene encodes a putative retinal G-protein coupled receptor. The gene is a member of the opsin subfamily of the 7 transmembrane, G-protein coupled receptor 1 family. Like other opsins which bind retinaldehyde, it contains a conserved lysine residue in the seventh transmembrane domain. The protein acts as a photoisomerase to catalyze the conversion of all-trans-retinal to 11-cis-retinal. The reverse isomerization occurs with rhodopsin in retinal photoreceptor cells. The protein is exclusively expressed in tissue adjacent to retinal photoreceptor cells, the retinal pigment epithelium and Mueller cells. This gene may be associated with autosomal recessive and autosomal dominant retinitis pigmentosa (arRP and adRP, respectively). Alternative splicing results in multiple transcript variants encoding different isoforms. [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).