

Product datasheet for **TR703968**

Gpr18 Rat shRNA Plasmid (Locus ID 679957)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Gpr18 Rat shRNA Plasmid (Locus ID 679957)
Locus ID:	679957
Synonyms:	MGC156838
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Gpr18 - Rat, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 679957). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001079710 , NM_001079710.1 , BC128782
UniProt ID:	A1A5S3
Summary:	Receptor for endocannabinoid N-arachidonyl glycine (NAGly) (PubMed:24431468). However, conflicting results about the role of NAGly as an agonist are reported (By similarity). Can also be activated by plant-derived and synthetic cannabinoid agonists (PubMed:24431468). The activity of this receptor is mediated by G proteins which inhibit adenylyl cyclase (By similarity). May contribute to regulation of the immune system (By similarity). Is required for normal homeostasis of CD8+ subsets of intraepithelial lymphocytes (IELs) (CD8alphaalpha and CD8alphabeta IELs) in small intestine by supporting preferential migration of CD8alphaalpha T-cells to intraepithelial compartment over lamina propria compartment, and by mediating their reconstitution into small intestine after bone marrow transplant (By similarity). Plays a role in hypotensive responses, mediating reduction in intraocular and blood pressure (PubMed:24431468). Mediates NAGly-induced process of reorganization of actin filaments and induction of acrosomal exocytosis (By similarity).[UniProtKB/Swiss-Prot Function]
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 . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).