

## Product datasheet for TR500003

### Grn Mouse shRNA Plasmid (Locus ID 14824)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Grn Mouse shRNA Plasmid (Locus ID 14824)
Locus ID:	14824
Synonyms:	epithelin; Pgrn
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Grn - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 14824). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC129849</a> , <a href="#">BC129850</a> , <a href="#">NM_008175</a> , <a href="#">NM_008175.1</a> , <a href="#">NM_008175.2</a> , <a href="#">NM_008175.3</a> , <a href="#">NM_008175.4</a> , <a href="#">BC037047</a> , <a href="#">BC049943</a>
UniProt ID:	<a href="#">P28798</a>
Summary:	Secreted proteins that act as key regulator of lysosomal function and as a growth factor involved in inflammation, wound healing and cell proliferation (PubMed:28073925, PubMed:8496151, PubMed:28541286, PubMed:28453791, PubMed:20026663, PubMed:23041626, PubMed:27789271, PubMed:12524533). Functions as regulator of proteins trafficking to lysosome and activity of lysosomal enzymes (PubMed:28453791, PubMed:28541286, PubMed:27789271). Facilitates also the acidification of lysosomes, causing degradation of mature CTSD by CTSB (PubMed:28073925). In addition, functions as wound-related growth factor that acts directly on dermal fibroblasts and endothelial cells to promote division, migration and the formation of capillary-like tubule structure (PubMed:12524533). Also promotes epithelial cell proliferation by blocking TNF-mediated neutrophil activation preventing release of oxidants and proteases (PubMed:8496151). Moreover, modulates inflammation in neuron by preserving neuron survival, axonal outgrowth and neuronal integrity (PubMed:23041626, PubMed:20026663).[UniProtKB/Swiss-Prot Function]



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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).