

## Product datasheet for **TR312620**

### Gremlin 1 (GREM1) Human shRNA Plasmid Kit (Locus ID 26585)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Gremlin 1 (GREM1) Human shRNA Plasmid Kit (Locus ID 26585)
Locus ID:	26585
Synonyms:	C15DUPq; CKTSF1B1; CRAC1; CRCS4; DAND2; DRM; DUP15q; GREMLIN; HMPS; HMPS1; IHG-2; MPSH; PIG2
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	GREM1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 26585). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">NM_001191322</a> , <a href="#">NM_001191323</a> , <a href="#">NM_013372</a> , <a href="#">NM_013372.1</a> , <a href="#">NM_013372.2</a> , <a href="#">NM_013372.3</a> , <a href="#">NM_013372.4</a> , <a href="#">NM_013372.5</a> , <a href="#">NM_013372.6</a> , <a href="#">NM_001191322.1</a> , <a href="#">NM_001191323.1</a> , <a href="#">BC093778</a> , <a href="#">BC093778.1</a> , <a href="#">BC069525</a> , <a href="#">BC101611</a> , <a href="#">NM_001368719</a> , <a href="#">NM_001191322.2</a> , <a href="#">NM_013372.7</a> , <a href="#">NM_001191323.2</a>
UniProt ID:	<a href="#">O60565</a>
Summary:	This gene encodes a member of the BMP (bone morphogenic protein) antagonist family. Like BMPs, BMP antagonists contain cystine knots and typically form homo- and heterodimers. The CAN (cerberus and dan) subfamily of BMP antagonists, to which this gene belongs, is characterized by a C-terminal cystine knot with an eight-membered ring. The antagonistic effect of the secreted glycosylated protein encoded by this gene is likely due to its direct binding to BMP proteins. As an antagonist of BMP, this gene may play a role in regulating organogenesis, body patterning, and tissue differentiation. In mouse, this protein has been shown to relay the sonic hedgehog (SHH) signal from the polarizing region to the apical ectodermal ridge during limb bud outgrowth. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2010]



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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).