

## **Product datasheet for TF312595**

## OriGene Technologies, Inc.

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## **Granulin (GRN) Human shRNA Plasmid Kit (Locus ID 2896)**

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: Granulin (GRN) Human shRNA Plasmid Kit (Locus ID 2896)

Locus ID: 2896

Synonyms: acrogranin; GEP; GEP, GP88, PEPI, PGRN, PCDGF; GP88; granulin; granulin-epithelin; PC cell-

derived growth factor; PCDGF; PEPI; PGRN; proepithelin; progranulin

**Vector:** pRFP-C-RS (TR30014)

E. coli Selection: Chloramphenicol (34 ug/ml)

Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

Components: GRN - Human, 4 unique 29mer shRNA constructs in retroviral RFP vector(Gene ID = 2896). 5µg

purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRFP-C-RS Vector, TR30015, included for free.

RefSeq: NM 001012479, NM 002087, NM 002087.1, NM 002087.2, NM 002087.3, NM 001012479.1,

BC010577, BC010577.2, BC000324, NM 002087.4

UniProt ID: P28799

**Summary:** Granulins are a family of secreted, glycosylated peptides that are cleaved from a single

precursor protein with 7.5 repeats of a highly conserved 12-cysteine granulin/epithelin motif. The 88 kDa precursor protein, progranulin, is also called proepithelin and PC cell-derived growth factor. Cleavage of the signal peptide produces mature granulin which can be further cleaved into a variety of active, 6 kDa peptides. These smaller cleavage products are named granulin A, granulin B, granulin C, etc. Epithelins 1 and 2 are synonymous with granulins A and B, respectively. Both the peptides and intact granulin protein regulate cell growth.

However, different members of the granulin protein family may act as inhibitors, stimulators, or have dual actions on cell growth. Granulin family members are important in normal

development, wound healing, and tumorigenesis. [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 <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.







## 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).