

## **Product datasheet for TR305299**

## OriGene Technologies, Inc.

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## **Endostatin (COL18A1) Human shRNA Plasmid Kit (Locus ID 80781)**

**Product data:** 

**Product Type:** shRNA Plasmids

Product Name: Endostatin (COL18A1) Human shRNA Plasmid Kit (Locus ID 80781)

**Locus ID:** 80781

Synonyms: GLCC; KNO; KNO1; KS

Vector: pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format:

Retroviral plasmids

COL18A1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

80781). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: NM 030582, NM 130444, NM 130445, NM 130445.1, NM 130445.2, NM 130445.3,

NM 030582.1, NM 030582.2, NM 030582.3, NM 130444.2, BC063833, BC063833.1, BC033715,

NM 030582.4, NM 130445.4

UniProt ID: P39060

Summary: This gene encodes the alpha chain of type XVIII collagen. This collagen is one of the

multiplexins, extracellular matrix proteins that contain multiple triple-helix domains (collagenous domains) interrupted by non-collagenous domains. A long isoform of the protein has an N-terminal domain that is homologous to the extracellular part of frizzled receptors. Proteolytic processing at several endogenous cleavage sites in the C-terminal domain results in production of endostatin, a potent antiangiogenic protein that is able to inhibit angiogenesis and tumor growth. Mutations in this gene are associated with Knobloch syndrome. The main features of this syndrome involve retinal abnormalities, so type XVIII

collagen may play an important role in retinal structure and in neural tube closure.

Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]

**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).