

Product datasheet for TR509929

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OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

Col4a2 Mouse shRNA Plasmid (Locus ID 12827)

Product data:

Product Type: shRNA Plasmids

Product Name: Col4a2 Mouse shRNA Plasmid (Locus ID 12827)

Locus ID: 12827

Col4; Col4a-2 Synonyms:

Vector: pRS (TR20003)

E. coli Selection: **Ampicillin** Mammalian Cell

Selection:

Puromycin

Format: Retroviral plasmids

Col4a2 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = Components:

12827). 5µg purified plasmid DNA per construct

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

NM 009932, NM 009932.1, NM 009932.2, NM 009932.3, NM 009932.4, BC138040, BC013560, RefSeq:

BC080789, BC107685

UniProt ID: P08122

Summary: This gene encodes the alpha-2 subunit of the type IV collagens, an essential component of

> basement membranes. The encoded protein forms a triple helical heterotrimer comprised of alpha-1 and alpha-2 subunits that assembles into a type IV collagen network. Canstatin, a peptide derived fom the C-terminus of the collagen chain, is a matrikine that has been shown to inhibit angiogenesis. Homozygous knockout mice for this gene exhibit impaired basement membrane integrity and embryonic lethality. This gene shares a bi-directional promoter with

a related gene on chromosome 8. [provided by RefSeg, Nov 2015]

These shRNA constructs were designed against multiple splice variants at this gene locus. To shRNA Design:

> 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.





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).