

## Product datasheet for **TR511105**

### Col4a1 Mouse shRNA Plasmid (Locus ID 12826)

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | shRNA Plasmids  |
| Product Name:             | Col4a1 Mouse shRNA Plasmid (Locus ID 12826)   |
| Locus ID:                 | 12826   |
| Synonyms:                 | Br; Bru; Col4; Col4a-1; Del(8)44; R; Raw; S; Svc  |
| Vector:                   | pRS (TR20003)   |
| E. coli Selection:        | Ampicillin  |
| Mammalian Cell Selection: | Puromycin   |
| Format:                   | Retroviral plasmids   |
| Components:               | Col4a1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 12826). 5µg purified plasmid DNA per construct<br>29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.  |
| RefSeq:                   | <a href="#">BC072650</a> , <a href="#">NM_009931</a> , <a href="#">NR_133670</a> , <a href="#">NM_009931.1</a> , <a href="#">NM_009931.2</a> , <a href="#">BC002269</a> , <a href="#">BC056620</a>  |
| UniProt ID:               | <a href="#">P02463</a>  |
| Summary:                  | This gene encodes the alpha-1 subunit of the type IV collagens, an essential component of basement membranes. The encoded protein forms a triple helical heterotrimer comprised of two alpha-1 and one alpha-2 subunits that assembles into a type IV collagen network. This gene is located adjacent to the gene encoding alpha-2 subunit. Mice lacking both the alpha-1 and alpha-2 subunits of collagen IV die in utero due to structural deficiencies in the basement membranes and certain mutations in this gene cause perinatal cerebral hemorrhage and porencephaly. Alternative splicing of this gene results in multiple transcript variants.<br>[provided by RefSeq, Nov 2015] |
| 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 <a href="mailto:techsupport@origene.com">techsupport@origene.com</a> . If you need a special design or shRNA sequence, please utilize our <a href="#">custom shRNA service</a> .  |



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**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).