

Product datasheet for **TR511788**

Col2a1 Mouse shRNA Plasmid (Locus ID 12824)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Col2a1 Mouse shRNA Plasmid (Locus ID 12824)
Locus ID:	12824
Synonyms:	Co; Col2; Col2a; Col2a-1; Del; Del1; Dmm; L; Lpk; M100413; Rgsc4; Rgsc8; Rgsc413; Rgsc856
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Col2a1 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 12824). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC051383 , BC052326 , BC082331 , NM_001113515 , NM_031163 , NM_031163.1 , NM_031163.2 , NM_031163.3 , NM_001113515.1 , NM_001113515.2 , BC052326.1 , BC030913
UniProt ID:	P28481
Summary:	This gene encodes the alpha-1 subunit of the fibril-forming type II collagen, the major component of cartilage and the vitreous humor of the eye. The encoded preproprotein forms homotrimeric, triple helical procollagen that undergoes proteolytic processing during fibril formation. Mice harboring certain mutations in this gene exhibit severe chondrodysplasia characterized by short limbs and trunk, craniofacial deformities and cleft palate. A complete lack of the encoded protein in mice results in postnatal lethality. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar proteolytic processing. [provided by RefSeq, Dec 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 techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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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. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).