

## Product datasheet for **TR305285**

### Collagen IX (COL9A1) Human shRNA Plasmid Kit (Locus ID 1297)

#### Product data:

Product Type:	shRNA Plasmids
Product Name:	Collagen IX (COL9A1) Human shRNA Plasmid Kit (Locus ID 1297)
Locus ID:	1297
Synonyms:	DJ149L1.1.2; EDM6; MED; STL4
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	COL9A1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 1297). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	<a href="#">BC015409</a> , <a href="#">NM_001851</a> , <a href="#">NM_078485</a> , <a href="#">NM_078485.1</a> , <a href="#">NM_078485.2</a> , <a href="#">NM_078485.3</a> , <a href="#">NM_001851.1</a> , <a href="#">NM_001851.2</a> , <a href="#">NM_001851.3</a> , <a href="#">NM_001851.4</a> , <a href="#">BC015409.1</a> , <a href="#">BC063646</a> , <a href="#">BC063646.1</a> , <a href="#">BC008620</a> , <a href="#">NM_001851.6</a> , <a href="#">NM_078485.4</a>
UniProt ID:	<a href="#">P20849</a>
Summary:	This gene encodes one of the three alpha chains of type IX collagen, which is a minor (5-20%) collagen component of hyaline cartilage. Type IX collagen is usually found in tissues containing type II collagen, a fibrillar collagen. Studies in knockout mice have shown that synthesis of the alpha 1 chain is essential for assembly of type IX collagen molecules, a heterotrimeric molecule, and that lack of type IX collagen is associated with early onset osteoarthritis. Mutations in this gene are associated with osteoarthritis in humans, with multiple epiphyseal dysplasia, 6, a form of chondrodysplasia, and with Stickler syndrome, a disease characterized by ophthalmic, orofacial, articular, and auditory defects. Two transcript variants that encode different isoforms have been identified for this gene. [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 <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).