

Product datasheet for **TR305287**

Collagen VI (COL6A3) Human shRNA Plasmid Kit (Locus ID 1293)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Collagen VI (COL6A3) Human shRNA Plasmid Kit (Locus ID 1293)
Locus ID:	1293
Synonyms:	BTHLM1; DYT27; UCMD1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	COL6A3 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 1293). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_004369 , NM_057164 , NM_057165 , NM_057166 , NM_057167 , NM_057167.1 , NM_057167.2 , NM_057167.3 , NM_057165.1 , NM_057165.2 , NM_057165.3 , NM_057165.4 , NM_057164.1 , NM_057164.2 , NM_057164.3 , NM_057164.4 , NM_057166.1 , NM_057166.2 , NM_057166.3 , NM_057166.4 , NM_004369.2 , NM_004369.3 , BC033174 , BC144595 , BC150625 , BC171790 , BC172233 , NM_057164.5 , NM_057166.5 , NM_057165.5 , NM_004369.4
UniProt ID:	P12111



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Summary:	<p>This gene encodes the alpha-3 chain, one of the three alpha chains of type VI collagen, a beaded filament collagen found in most connective tissues. The alpha-3 chain of type VI collagen is much larger than the alpha-1 and -2 chains. This difference in size is largely due to an increase in the number of subdomains, similar to von Willebrand Factor type A domains, that are found in the amino terminal globular domain of all the alpha chains. These domains have been shown to bind extracellular matrix proteins, an interaction that explains the importance of this collagen in organizing matrix components. Mutations in the type VI collagen genes are associated with Bethlem myopathy, a rare autosomal dominant proximal myopathy with early childhood onset. Mutations in this gene are also a cause of Ullrich congenital muscular dystrophy, also referred to as Ullrich scleroatonic muscular dystrophy, an autosomal recessive congenital myopathy that is more severe than Bethlem myopathy. Multiple transcript variants have been identified, but the full-length nature of only some of these variants has been described. [provided by RefSeq, Jun 2009]</p>
shRNA Design:	<p>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.</p>
Performance Guaranteed:	<p>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.</p> <p>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).</p>