

Product datasheet for **TR509106**

Cldn18 Mouse shRNA Plasmid (Locus ID 56492)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Cldn18 Mouse shRNA Plasmid (Locus ID 56492)
Locus ID:	56492
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Cldn18 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 56492). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_001194921 , NM_001194922 , NM_001194923 , NM_019815 , NM_019815.1 , NM_019815.2 , NM_019815.3 , NM_001194921.1 , NM_001194922.1 , NM_001194923.1 , BC140209 , BC141602
UniProt ID:	P56857
Summary:	This gene encodes a member of the claudin family. Claudins are integral membrane proteins and components of tight junction strands. Tight junction strands serve as a physical barrier to prevent solutes and water from passing freely through the paracellular space between epithelial or endothelial cell sheets, and also play critical roles in maintaining cell polarity and signal transductions. This gene is a downstream target gene regulated by the T/EBP/NKX2.1 homeodomain transcription factor. Four alternatively spliced transcript variants resulted from alternative promoters and alternative splicing have been identified, which encode two lung-specific isoforms and two stomach-specific isoforms respectively. This gene is also expressed in colons, inner ear and skin, and its expression is increased in both experimental colitis and ulcerative colitis. [provided by RefSeq, Aug 2010]
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).