

Product datasheet for **TR303126**

Macrophage Scavenger Receptor I (MSR1) Human shRNA Plasmid Kit (Locus ID 4481)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Macrophage Scavenger Receptor I (MSR1) Human shRNA Plasmid Kit (Locus ID 4481)
Locus ID:	4481
Synonyms:	CD204; phSR1; phSR2; SCARA1; SR-A; SR-AI; SR-AII; SR-AIII; SRA
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	MSR1 - Human, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 4481). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	NM_002445 , NM_138715 , NM_138716 , NM_138715.1 , NM_138715.2 , NM_002445.1 , NM_002445.2 , NM_002445.3 , NM_138716.1 , NM_138716.2 , BC063878 , BC063878.1 , NM_001363744 , NM_002445.4 , NM_138715.3
UniProt ID:	P21757
Summary:	This gene encodes the class A macrophage scavenger receptors, which include three different types (1, 2, 3) generated by alternative splicing of this gene. These receptors or isoforms are macrophage-specific trimeric integral membrane glycoproteins and have been implicated in many macrophage-associated physiological and pathological processes including atherosclerosis, Alzheimer's disease, and host defense. The isoforms type 1 and type 2 are functional receptors and are able to mediate the endocytosis of modified low density lipoproteins (LDLs). The isoform type 3 does not internalize modified LDL (acetyl-LDL) despite having the domain shown to mediate this function in the types 1 and 2 isoforms. It has an altered intracellular processing and is trapped within the endoplasmic reticulum, making it unable to perform endocytosis. The isoform type 3 can inhibit the function of isoforms type 1 and type 2 when co-expressed, indicating a dominant negative effect and suggesting a mechanism for regulation of scavenger receptor activity in macrophages. [provided by RefSeq, Jul 2008]



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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](#).

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).