

#### Product datasheet for RC209609L1

#### OriGene Technologies, Inc.

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### Macrophage Scavenger Receptor I (MSR1) (NM\_138715) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Macrophage Scavenger Receptor I (MSR1) (NM\_138715) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Macrophage Scavenger Receptor I

Synonyms: CD204; phSR1; phSR2; SCARA1; SR-A; SR-AI; SR-AII; SR-AIII; SRA

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

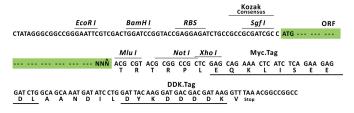
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC209609).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_138715

ORF Size: 1353 bp





# Macrophage Scavenger Receptor I (MSR1) (NM\_138715) Human Tagged Lenti ORF Clone – RC209609L1

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 138715.2</u>

RefSeq Size: 3761 bp
RefSeq ORF: 1356 bp
Locus ID: 4481

UniProt ID: P21757

Cytogenetics: 8p22

**Domains:** SR, Macscav rec, Collagen

**Protein Families:** Druggable Genome, Transmembrane

MW: 49.8 kDa

**Gene 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

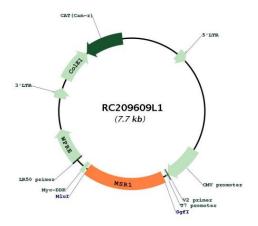
lipoproteins (LDLs). The isoform type 3 does not internalize modified LDL (acetyl-LDL) despite having the domain shown to mediate this function in the types 1 and 2 isoforms. It has an altered intracellular processing and is trapped within the endoplasmic reticulum, making it

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

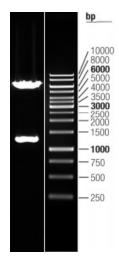
RefSeq, Jul 2008]



## **Product images:**



Circular map for RC209609L1



Double digestion of RC209609L1 using Sgfl and Mlul  $\,$