

## Product datasheet for RC223314L4V

## OriGene Technologies, Inc.

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## Macrophage Scavenger Receptor I (MSR1) (NM\_138716) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** Macrophage Scavenger Receptor I (MSR1) (NM\_138716) Human Tagged ORF Clone Lentiviral

Particle

Symbol: Macrophage Scavenger Receptor I

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

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_138716 **ORF Size:** 1164 bp

**ORF Nucleotide** 

Sequence:

The ORF insert of this clone is exactly the same as(RC223314).

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.

**RefSeq:** <u>NM 138716.1</u>

 RefSeq Size:
 3493 bp

 RefSeq ORF:
 1167 bp

 Locus ID:
 4481

 UniProt ID:
 P21757

Cytogenetics: 8p22

**Protein Families:** Druggable Genome, Transmembrane



MW:

42.8 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]