

## Product datasheet for RC223314

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Macrophage Scavenger Receptor I (MSR1) (NM_138716) Human Tagged 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 Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC223314 representing NM_138716 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCCGGATCGCC

ATGGAGCAGTGGGATCACTTTCACAATCAACAGGAGGACACTGATAGCTGCTCCGAATCTGTGAAATTTG  
ATGCTCGCTCAATGACAGCTTTGCTTCTCCGAATCCTAAAAACAGCCCTTCCCTCAAGAGAACTGAA  
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CTCAAAGTCTCAGGGAAAAGGAAATGACAGCGAAGAGGAAATGAGATTTCAAGAAGTCTTTATGGAACA  
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GAAATCAGTAAATTAGAGGAGCGTGTACAATGTATCAGCAGAAATATGGCTATGAAAGAAGAACAAG  
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GAGCTGTTACATTCTGAAGATGCTGGAGTCACTTGCACTTTA

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**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:** [NM\\_138716.2](#)

**RefSeq Size:** 3493 bp

**RefSeq ORF:** 1167 bp

**Locus ID:** 4481

**UniProt ID:** [P21757](#)

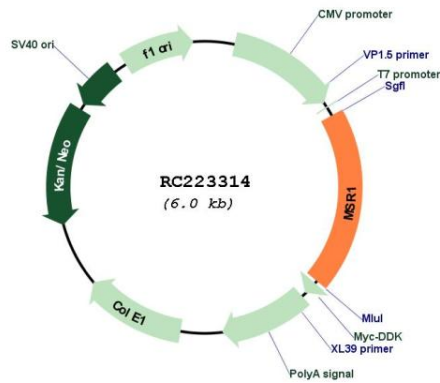
**Cytogenetics:** 8p22

**Protein Families:** Druggable Genome, Transmembrane

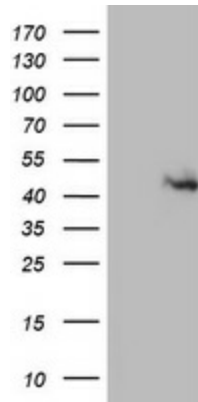
**MW:** 42.8 kDa

**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]

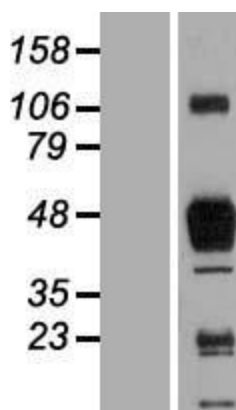
Product images:



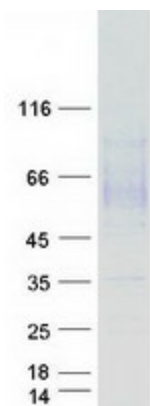
Circular map for RC223314



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MSR1 (Cat# RC223314, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MSR1 (Cat# [TA802777]). Positive lysates [LY408527] (100ug) and [LC408527] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY408527]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223314 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MSR1 protein (Cat# [TP323314]). The protein was produced from HEK293T cells transfected with MSR1 cDNA clone (Cat# RC223314) using MegaTran 2.0 (Cat# [TT210002]).