

Product datasheet for **SC127877**

Macrophage Scavenger Receptor I (MSR1) (NM_138716) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Macrophage Scavenger Receptor I (MSR1) (NM_138716) Human Untagged Clone
Tag:	Tag Free
Symbol:	Macrophage Scavenger Receptor I
Synonyms:	CD204; phSR1; phSR2; SCARA1; SR-A; SR-AI; SR-AII; SR-AIII; SRA
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_138716, the custom clone sequence may differ by one or more nucleotides

```
ATGGAGCAGTGGGATCACTTTCACAATCAACAGGAGGACTGATAGCTGCTCCGAATCTGTGAAATTTG
ATGCTCGCTCAATGACAGCTTTGCTTCCTCCGAATCCTAAAAACAGCCCTTCCCTTCAAGAGAACTGAA
GTCCTTCAAAGCTGCACTGATTGCCCTTACCTCCTCGTGTGGCAGTTCTCATCCCTCTCATTGGAATA
GTGGCAGCTCAACTCCTGAAGTGGGAAACGAAGAATTGCTCAGTTAGTTCAACTAATGCAATGATATAA
CTCAAAGTCTCACGGGAAAAGGAAATGACAGCGAAGAGGAAATGAGATTTCAAGAAGTCTTTATGGAACA
CATGAGCAACATGGAGAAGAGAATCCAGCATATTTTAGACATGGAAGCCAACCTCATGGACACAGAGCAT
TTCCAAAATTTTACAGCATGACAACCTGATCAAAGATTTAATGACATTCCTTCTGCAGCTAAGTACCTTGT
CCTCAGTCCAGGGACATGGGAATGCAATAGATGAAATCTCCAAGTCCCTAATAAGTTTGAATACCACATT
GCTTGATTTGCAGCTCAACATAGAAAATCTGAATGGCAAAATCCAAGAGAATACCTTCAAACAACAAGAG
GAAATCAGTAAATTAGAGGAGCGTGTACAATGTATCAGCAGAAATATGGCTATGAAAGAAGAACAAG
TGCATTTGGAACAGGAAATAAAAGGAGAAGTGAAGTACTGAATAACATCACTAATGATCTCAGACTGAA
AGATTGGGAACATTCTCAGACCTTGAGAAATATCACTTTAATTCAAGGTCTCCTGGACCCCGGGTGAA
AAAGGAGATCGAGGTCCCACTGGAGAAAGTGGTCCACGAGGATTTCCAGGTCCAATAGGTCTCCGGGTC
TTAAAGGTGATCGGGGAGCAATTGGCTTTCTGGAAGTCGAGGACTCCCAGGATATGCCGAAGGCCAGG
AAATCTGGACCAAAGGCCAGAAAGGGGAAAAGGGGAGTGAAACACATTAAGTACTGGTCCAATATGG
CTGAATGAAGTGTGTTTTGGGAGAGAATCATCTATTGAAGAATGAAAATTCGGCAATGGGGGACAA
GAGCCTGTTACATTCTGAAGATGCTGGAGTCACTTGCACCTTTATAA
```



[View online »](#)

5' Read Nucleotide Sequence:	>OriGene 5' read for NM_138716 unedited AATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGATTTCTTTTTCATGTACC AGATGCTGAAATACTATGAGATAAAGATTTTAGGTTTCAATTGTAAGAGAGAGAAGTGG ATAAATCAGTGCTGCTTTCTTTAGGACGAAAGAAGTATGGAGCAGTGGGATCACTTTTAC AATCAACAGGAGGACACTGATAGCTGCTCCGAATCTGTGAAATTTGATGCTCGCTCAATG ACAGCTTTGCTTCTCCGAATCCTAAAAACAGCCCTTCCCTTCAAGAGAACTGAAGTCC TTCAAAGCTGCACTGATTGCCCTTTACCTCCTCGTGTGGTTCAGTTCATCCCTCTCATT GGAATAGTGGCAGCTCAACTCCTGAAGTGGGAAACGAAGAATTGCTCAGTTAGTTCAACT AATGCAAATGATATAACTCANAGTCTCACGGGAAAAGGAAATGACAGCGAAGAGGAAATG AGATTTCAAGAAGTCTTTATGGAACACATGAGCAACATGGAGAAGAGAATCCAGCATATT TTAGACATGGAAGCCACCTCATGGACACAGAGCATTTNCAANANTCAGCATGACACTGA TCAAGATTTATGACATTCTGCACTAATACCTGTTTCTCATCAGGACATGGATGCATAA TGAATCTCAGTCTATAGTTGATACAATGCTGATGAGCTACTAAAAC
Restriction Sites:	Please inquire
ACCN:	NM_138716
Insert Size:	3000 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none"> 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_138716.1</u> , <u>NP_619730.1</u>
RefSeq Size:	3493 bp
RefSeq ORF:	1167 bp
Locus ID:	4481
UniProt ID:	<u>P21757</u>
Cytogenetics:	8p22
Protein Families:	Druggable Genome, Transmembrane

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]

Transcript Variant: This variant (SR-AIII) lacks an exon in the coding region, but maintains the same reading frame, as compared to variant SR-AI. It encodes an isoform type 3 that lacks 63 internal amino acids compared to isoform type 1.