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# Product Information

## MemDX™ Membrane Protein Human MSR1 (Macrophage scavenger receptor 1) Full Length

Cat. No.: **MPC1876K**
This product is for research use only and is not intended for diagnostic use.

This product is a 49.7 kDa Human MSR1 membrane protein expressed in HEK293. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

## Product Specifications

**Host Species**
Human

**Target Protein**
MSR1

**Protein Length**
Full length

**Protein Class**
Receptor

**Molecular Weight**
49.7 kDa

**TMD**
1

**Sequence**
MEQWDHFHNQQEDTDSCSESVKFDARSMTALLPPNPKNSPSLQEKLKSFK
AALIALYLLVFAVLIPLIGIVAAQLLKWETKNCSVSSTNANDITQSLTGK
GNDSEEEMRFQEVFMEHMSNMEKRIQHILDMEANLMDTEHFQNFSMTTDQ
RFNDILLQLSTLFSSVQGHGNAIDEISKSLISLNTTLLDLQLNIENLNGK
IQENTFKQQEEISKLEERVYNVSAEIMAMKEEQVHLEQEIKGEVKVLNNI
TNDLRLKDWEHSQTLRNITLIQGPPGPPGEKGDRGPTGESGPRGFPGPIG
PPGLKGDRGAIGFPGSRGLPGYAGRPGNSGPKGQKGEKGSGNTLTPFTKV
RLVGGSGPHEGRVEILHSGQWGTICDDRWEVRVGQVVCRSLGYPGVQAVH
KAAHFGQGTGPIWLNEVFCFGRESSIEECKIRQWGTRACSHSEDAGVTCT
L

## Product Description

**Expression Systems**
HEK293

**Tag**

Based on specific requirements

**Protein Format**

Detergent or based on specific requirements

**Form**

Liquid

**Storage**

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -72°C or lower. Avoid freeze/thaw cycles.

## Target

**Target Protein**

MSR1

**Full Name**

Macrophage scavenger receptor 1

**Introduction**

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.

**Alternative Names**

MSR1; SRA; SR-A; CD204; SR-AI; phSR1; phSR2; SCARA1; SR-AII; SR-AIII; macrophage scavenger receptor types I and II; macrophage acetylated LDL receptor I and II; macrophage scavenger receptor type III; scavenger receptor class A member 1; Macrophage scavenger receptor 1

**Gene ID**

4481

**UniProt ID**

P21757