# Recombinant Human MSR1/CD204 Protein

ABclonal www.abclonal.com

Catalog No.: RP01033 Recombinant

## Sequence Information

**Species** Gene ID **Swiss Prot** Human 4481 P21757

**Tags** 

C-His

**Synonyms** 

CD204; SCARA1; SR-A; SR-AI; SR-AII; SR-AIII; SRA; phSR1; phSR2;MSR1;SCARA1;SR-A;SR-AI;SR-AII;SR-AIII;SRA;phSR1;phSR2

## **Product Information**

**Purification** HEK293 cells ≥ 90 % as

determined by SDS-PAGE.

Calculated MW Observed MW

42.14 kDa 60-80 kDa

#### Endotoxin

< 0.1 EU/µg of the protein by LAL method.

#### Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.Contact us for customized product form or formulation.

#### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

## Contact

<u>a</u>	400-999-6126
$\bowtie$	cn.market@abclonal.com.cn
•	www.abclonal.com.cn

## **Background**

This protein is 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 coexpressed, indicating a dominant negative effect and suggesting a mechanism for regulation of scavenger receptor activity in macrophages.

## **Basic Information**

## Description

Recombinant Human MSR1/CD204 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Lys77-Leu451) of human CD204 (Accession #NP\_619729.1) fused with a 6×His tag at the C-terminus.

#### **Bio-Activity**

1.Measured by its binding ability in a functional ELISA.Immobilized Human MSR1 Protein at 1µg/mL (100 µL/well) can bind MSR1 Rabbit pAb with a linear range of 0.76-2.88 ng/mL.|2.Measured by its binding ability in a functional ELISA. Immobilized Human A-I/APOA1 at 5μg/mL (100 μL/well) can bind Human MSR1/CD204 with a linear range of 1-49.4ng/mL.

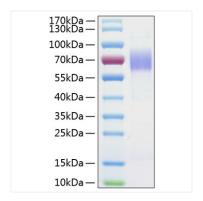
## Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

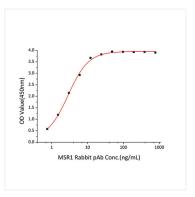
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

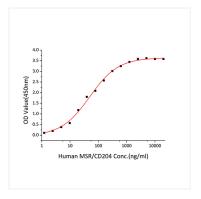
## **Validation Data**



Recombinant Human MSR1/CD204 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Immobilized recombinant Human MSR1 Protein at  $1\mu$ g/mL (100  $\mu$ L/well) can bind MSR1 Rabbit pAb with a linear range of 0.76-2.88 ng/mL.



Immobilized Human A-I/APOA1 at  $5\mu g/mL$  (100  $\mu L/well$ ) can bind Human MSR1/CD204 with a linear range of 1-49.4ng/mL.