

# Rat MSR1 / SCARA1 Protein (Fc Tag)

Catalog Number: 80363-R01H



Sino Biological  
Biological Solution Specialist

## General Information

### Gene Name Synonym:

MSR1

### Protein Construction:

A DNA sequence encoding the rat MSR1 (Trp79-Ser454) was expressed, fused with the Fc region of human IgG1 at the N-terminus.

**Source:** Rat

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 95 % as determined by SDS-PAGE

### Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

### Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

**Predicted N terminal:** Glu

### Molecular Mass:

The recombinant Rat MSR1/Fc comprises 636 amino acids and has a predicted molecular mass of 69.2 kDa. The apparent molecular mass of the protein is approximately 89 kDa in SDS-PAGE under reducing conditions.

### Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

### Storage:

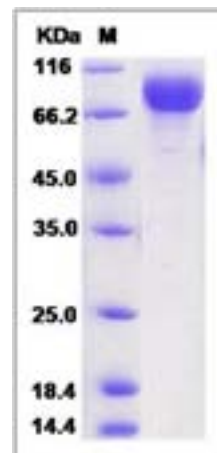
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

### Reconstitution:

Detailed reconstitution instructions are sent along with the products.

## SDS-PAGE:



## Protein Description

Macrophage scavenger receptor types I and II, also known as Macrophage acetylated LDL receptor I and II, Scavenger receptor class A member 1, CD204, MSR1 and SCARA1, is a single-pass type II membrane protein which contains onecollagen-like domain and oneSRCR domain. Macrophages are distributed in all peripheral tissues and play a critical role in the first line of the innate immune defenses against bacterial infection by phagocytosis of bacterial pathogens through the macrophage scavenger receptor 1 (MSR1). MSR1 / SCARA1 is one of the membrane glycoproteins implicated in the pathologic deposition of cholesterol in arterial walls during atherogenesis. Two types of receptor subunits exist. These receptors mediate the endocytosis of a diverse group of macromolecules, including modified low density lipoproteins (LDL). MSR1 / SCARA1 is also involved in chronic inflammation which is a risk factor for prostate cancer. MSR1 1 gene was identified as a candidate susceptibility gene for hereditary prostate cancer and as a risk factor for sporadic prostate cancer.

## References

1.Wang L. et al., 2003, Nat Genet. 35 (2): 128-9. 2.Chen Y.C. et al., 2008, Cancer Epidemiol Biomarkers Prev. 17 (4): 1001-3. 3.Shirato K. et al., 2009, Pflugers Arch. 459 (1): 93-103.

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