

## Recombinant Rat MSR1/SCARA1/CD204 Protein (His Tag)

**Catalog Number:** PKSR030203

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

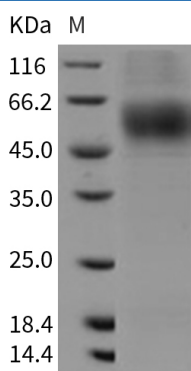
### Description

<b>Species</b>	Rat
<b>Source</b>	HEK293 Cells-derived Rat MSR1/SCARA 1/CD204 protein Trp79-Ser454, with an N-terminal His
<b>Calculated MW</b>	43.1 kDa
<b>Observed MW</b>	51-60 kDa
<b>Accession</b>	NP_001178868.1
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

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 one collagen-like domain and one SRCR 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 gene was identified as a candidate susceptibility gene for hereditary prostate cancer and as a risk factor for sporadic prostate cancer.