

HUMAN MSR1 PROTEIN**Cat.#:** 12264**Product Name:** Human MSR1 Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** SRA;SR-A;CD204;SR-AI;phSR1;phSR2;SCARA1;SR-AII;SR-AIII**Target:** MSR1**UNIPROT ID:** P21757**Description:** Recombinant human MSR1 Protein with N-terminal 6xHis tag

Background: 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]

Species/Host: HEK293**Molecular Weight:** The protein has a predicted molecular mass of 42.1 kDa after removal of the signal peptide.**Molecular Characterization:** 6xHis tag MSR1(Lys77-Leu451)**Purity:** The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.**Storage & Shipping:** Store at -20°C to -80°C for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at -80°C (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

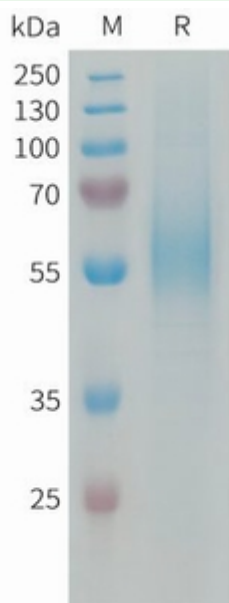


Figure 1. Human MSR1 Protein, His Tag on SDS-PAGE under reducing condition.