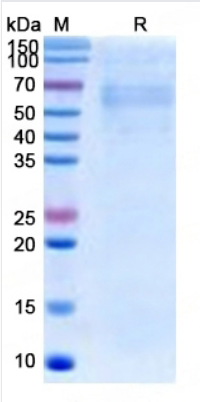
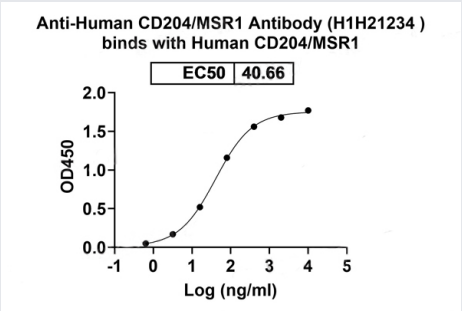
CD204/MSR1 Human Recombinant Protein

PRODUCT OVERVIEW

Product Name	CD204/MSR1, Recombinant Protein
Full Product Name	Recombinant Human CD204/MSR1 Protein, C-His
Product Gene Name	CD204/MSR1 recombinant protein
Product Synonym Names	Macrophage acetylated LDL receptor I and II; SCARA1; Macrophage scavenger receptor types I and II; Scavenger receptor class A member 1; CD204; MSR1
Host	Mammalian
Form/Format	Liquid; 0.01M PBS, pH7.4.
Purity/Purification	>90% as determined by SDS-PAGE
Preparation and Storage	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 2 to 8 degree C for one week. Store at -20 to -80 degree C for twelve months from the date of receipt.
Molecular Weight	451
Sequence Positions	Lys77-Leu451
OMIM	phenotype 614266
3D Structure	ModBase 3D Structure for P21757
Species	Human
Reconstitution	Reconstitute in sterile water for a stock solution.
Product Categories/Family for CD204/MSR1 recombinant protein	Recombinant Proteins
ISO Certification	Manufactured in an ISO 9001:2015 Certified Laboratory.
Applications Tested/Suitable for CD204/MSR1 recombinant protein	SDS-PAGE (SDS), Western Blot (WB), ELISA (EIA), Immunogen
Related Product Information for CD204/MSR1 recombinant protein	MBS1576307 is a recombinant protein targeting CD204/MSR1. Also known as Recombinant Human CD204/MSR1 Protein, C-His. Host: Mammalian.
Other Notes	Small volumes of CD204/MSR1 recombinant protein vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.



SDS-Page of CD204/MSR1 recombinant protein
SDS PAGE for recombinant Human CD204/MSR1 Protein



Bioactivity of CD204/MSR1 recombinant protein
Detects Human CD204/MSR1 Antibody (H1H21234) in indirect ELISAs.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CD204/MSR1. It may not necessarily be applicable to this product.

NCBI GI #	127357
NCBI GeneID	4481
NCBI Accession #	P21757.1
UniProt Primary Accession #	P21757
UniProt Secondary Accession #	O60505; P21759; Q45F10; D3DSP3
UniProt Related Accession #	P21757
NCBI Official Full Name	Macrophage scavenger receptor types I and II
NCBI Official Synonym Full Names	macrophage scavenger receptor 1
NCBI Official Symbol	MSR1
NCBI Official Synonym Symbols	SRA; SR-A; CD204; phSR1; phSR2; SCARA1
UniProt Protein Name	Macrophage scavenger receptor types I and II
UniProt Synonym Protein Names	Macrophage acetylated LDL receptor I and II; Scavenger receptor class A member 1; CD_antigen: CD204
UniProt Gene Name	MSR1
UniProt Synonym Gene Names	SCARA1
UniProt Entry Name	MSRE_HUMAN
NCBI Protein Information	macrophage scavenger receptor types I and II; scavenger receptor class A member 1; scavenger receptor class A, member 1; macrophage scavenger receptor type III; macrophage acetylated LDL receptor I and II
NCBI Summary for CD204/MSR1	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]

UniProt Comments for CD204/MSR1	MSR1: 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). Isoform III does not internalize actetylated LDL. Defects in MSR1 may be a cause of prostate cancer (PC). A malignancy originating in tissues of the prostate. Most prostate cancers are adenocarcinomas that develop in the acini of the prostatic ducts. Other rare histopathologic types of prostate cancer that occur in approximately 5% of patients include small cell carcinoma, mucinous carcinoma, prostatic ductal carcinoma, transitional cell carcinoma, squamous cell carcinoma, basal cell carcinoma, adenoid cystic carcinoma (basaloid), signet- ring cell carcinoma and neuroendocrine carcinoma. MSR1 variants may play a role in susceptibility to prostate cancer. MSR1 variants have been found in individuals with prostate cancer and co-segregate with the disease in some families. Defects in MSR1 may be a cause of Barrett esophagus (BE). A condition characterized by a metaplastic change in which normal esophageal squamous epithelium is replaced by a columnar and intestinal-type epithelium. Patients with Barrett esophagus have an increased risk of esophageal adenocarcinoma. The main cause of Barrett esophagus is gastroesophageal reflux. The retrograde movement of acid and bile salts from the stomach into the esophagus causes prolonged injury to the esophageal epithelium and induces chronic esophagitis, which in turn is believed to trigger the pathologic changes. Genetic variants in MSR1 have been found in individuals with Barrett esophagus and are thought to contribute to disease susceptibility. 3 isoforms of the human protein are produced by alternative splicing. Protein type: Membrane protein, integral Chromosomal Location of Human Ortholog: 8p22 Cellular Component: collagen; integral to plasma membrane; plasma membrane; cytosol Molecular Function: protein binding; low-density lipoprotein binding; scavenger receptor activity Biological Process: receptor-mediated endocytosis; cholesterol transport; lipoprotein transport Disease: Prostate Cancer; Barrett Esophagus
Research Articles on CD204/MSR1	**1.** monomeric collagen type I via CD204 induces phospho-Akt expression shifting alveolar macrophages to the profibrotic M2 type. Innate immune responses induced by collagen monomers might perpetuate pulmonary fibrosis.
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