

MSR1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17001B

Specification

MSR1 Antibody (C-term) - Product Information

Application WB,E
Primary Accession P21757

Other Accession <u>P21758</u>, <u>NP 619729.1</u>, <u>NP 619730.1</u>

Reactivity Human, Mouse

Predicted Bovine
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Antigen Region 336-364

MSR1 Antibody (C-term) - Additional Information

Gene ID 4481

Other Names

Macrophage scavenger receptor types I and II, Macrophage acetylated LDL receptor I and II, Scavenger receptor class A member 1, CD204, MSR1, SCARA1

Target/Specificity

This MSR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 336-364 amino acids from the C-terminal region of human MSR1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

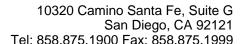
Precautions

MSR1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MSR1 Antibody (C-term) - Protein Information

Name MSR1

Synonyms SCARA1





Function 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) (PubMed:2251254). Isoform III does not internalize acetylated LDL (PubMed:9548586).

Cellular Location

Membrane; Single-pass type II membrane protein.

Tissue Location

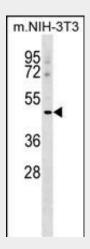
Isoform I, isoform II and isoform III are expressed in monocyte-derived macrophages. Isoform I and isoform II are expressed in the liver, placenta and brain.

MSR1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MSR1 Antibody (C-term) - Images



MSR1 Antibody (C-term) (Cat. #AP17001b) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane). This demonstrates the MSR1 antibody detected the MSR1 protein (arrow).

MSR1 Antibody (C-term) - 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.

MSR1 Antibody (C-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Wang, Y., et al. J. Hum. Genet. 55(8):490-494(2010) Voruganti, V.S., et al. Am. J. Clin. Nutr. 91(6):1574-1583(2010) Nonomura, N., et al. Cancer Sci. 101(6):1570-1573(2010) Seizer, P., et al. Semin. Thromb. Hemost. 36(2):157-162(2010) MSR1 Antibody (C-term) - Citations

• AMP-activated protein kinase attenuates oxLDL uptake in macrophages through PP2A/NF-kB/LOX-1 pathway.