ARG22422
anti-CD204 / MSR1 antibody [2F8] (Biotin)

Package: 50 µg
Store at: 4°C

Summary

Product Description	Biotin-conjugated Rat Monoclonal antibody [2F8] recognizes CD204 / MSR1 This antibody recognizes the murine scavenger receptor class A (SRA), type I and II, also known as CD204. CD204 is expressed by tissue macrophages and functions both as an endocytic receptor for lipoproteins and as an adhesion receptor for macrophages binding to ligand rich tissues e.g. atherosclerotic lesions. Clone 2F8 inhibits the uptake of acetylated low-density lipoproteins and also inhibits divalent cation independent adhesion (Fraser et al. 1993). Rat anti Mouse CD204 antibody, clone 2F8 recognizes an epitope within SRA that is polymorphic in the SRA from C57BL/6 mice. Clone 2F8 is therefore unsuitable for use with the C57BL/6 mouse strain (Daugherty et al. 2000).
Tested Reactivity	Ms, Cfsh, Pig
Tested Application	FACS
Host	Rat
Clonality	Monoclonal
Clone	2F8
Isotype	IgG2b
Target Name	CD204 / MSR1
Species	Mouse
Immunogen	Raw 264 cell line.
Conjugation	Biotin
Alternate Names	Macrophage scavenger receptor types I and II; SR-A; SCARA1; Macrophage acetylated LDL receptor I and II; SRA; CD antigen CD204; Scavenger receptor class A member 1; CD204; phSR1; phSR2

Application Instructions

Application table

Application	Dilution
FACS	Neat

Application Note: FACS: Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

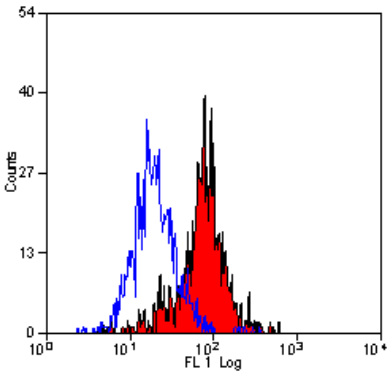
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS, 0.09% Sodium azide and 1% BSA.
Preservative	0.09% Sodium azide
Stabilizer	1% BSA

Concentration	0.1 mg/ml
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	Msr1
Gene Full Name	macrophage scavenger receptor 1
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]
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). Isoform III does not internalize acetylated LDL. [UniProt]
Calculated Mw	50 kDa

Images



ARG22422 anti-CD204 / MSR1 antibody [2F8] (Biotin) FACS image

Flow Cytometry: Mouse peritoneal macrophages stained with ARG22422 anti-CD204 / MSR1 antibody [2F8] (Biotin).