

ARG22510 anti-CD204 / MSR1 antibody [2F8] (FITC)

Package: 50 µg
Store at: 4°C

Summary

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| Product Description | FITC-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 | FITC |
| 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 | <table> <tr> <th>Application</th><th>Dilution</th></tr> <tr> <td>FACS</td><td>Neat</td></tr> </table> | Application | Dilution | FACS | Neat |
|-------------------|---|-------------|----------|------|------|
| Application | Dilution | | | | |
| FACS | Neat | | | | |
| Application Note | <p>FACS: Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.</p> <p>* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.</p> | | | | |

Properties

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

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| 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

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|----------------|---|
| 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 |