

# Monoclonal Anti-mouse SR-AI/MSR1-Fluorescein

Catalog Number: FAB1797F

Lot Number: ABII01

100 Tests

## Reagents Provided

**Carboxyfluorescein (CFS)-conjugated rat monoclonal anti-mouse SR-AI/MSR1:** Supplied as 25 µg of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

**Clone #:** 268318

**Isotype:** rat IgG<sub>2B</sub>

## Reagents Not Provided

- Flow Cytometry Staining Buffer (Catalog # FC001) or other BSA-supplemented saline buffer.

## Storage

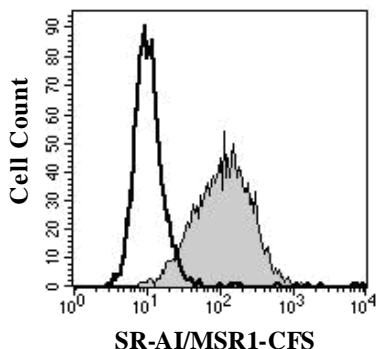
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2° - 8° C.

## Intended Use

Designed to quantitatively determine the percentage of cells bearing SR-AI/MSR1 within a population and qualitatively determine the density of SR-AI/MSR1 on cell surfaces by flow cytometry.

## Product Description

This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a rat immunized with purified, NS0-derived, recombinant mouse Scavenger Receptor class A isoform I (rmSR-AI; aa 83 - 458) extracellular domain. The IgG fraction of the tissue culture supernatant was purified by Protein G affinity chromatography. The purified antibody was then conjugated to CFS fluorochrome. Cell surface expression of SR-AI/MSR1 is determined by flow cytometry using 488 nm wavelength excitation and monitoring emitted fluorescence with a detector optimized to collect peak emissions at 515 - 545 nm.



RAW264.7 cells were stained with CFS-conjugated anti-mouse SR-AI/MSR1 (Catalog # FAB1797F, filled histogram) or isotype control (Catalog # IC013F, open histogram).

## Background Information

SR-AI, also known as Macrophage Scavenger Receptor 1 (MSR1), is one isoform of the class A scavenger receptor. It is a trimeric type II membrane protein expressed by macrophages, dendritic cells, Kupffer cells, and microglia. SR-AI binds a broad range of polyanionic ligands including modified proteins, polyribonucleotides, polysaccharides, phospholipids, bacterial products, and some chemical compounds. SR-AI plays a role in atherogenesis and the immune response.

## Flow Cytometry Validation

This antibody has been tested for flow cytometry using RAW264.7 cells.

- Cells may be Fc-blocked with 1 µg of mouse IgG/10<sup>5</sup> cells for 15 minutes at room temperature. Do not wash excess blocking IgG from this reaction.
- After blocking, 10 µL of conjugated antibody was added to 1 - 2.5 x 10<sup>5</sup> cells and incubated for 30 minutes at room temperature.
- Unbound antibody was removed by washing the cells twice in Flow Cytometry Staining Buffer (Catalog # FC001). Note that whole blood requires a RBC lysis step at this point using Flow Cytometry Mouse Lyse Buffer (Catalog # FC003).
- The cells were resuspended in Flow Cytometry Staining Buffer for final flow cytometric analysis. As a control for this analysis, cells in a separate tube should be treated with CFS-labeled rat IgG<sub>2B</sub> antibody. This procedure may need to be modified, depending upon the cell type and final utilization. Individual users may need to titrate to determine the optimal reagent amount for their specific use.

**Warning:** Contains sodium azide as a preservative - sodium azide may react with lead and copper plumbing to form explosive metal azides. Flush with large volumes of water during disposal.