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# Product datasheet for SM083FS

## MHC Class II I-Ak Mouse Monoclonal Antibody [Clone ID: 14V.18]

### Product data:

| | |
|---|---|
| **Product Type:** | Primary Antibodies |
| **Clone Name:** | 14V.18 |
| **Applications:** | FC |
| **Recommended Dilution:** | **Flow Cytometry** (See Protocols). |
| **Reactivity:** | Mouse |
| **Host:** | Mouse |
| **Isotype:** | IgG2a |
| **Clonality:** | Monoclonal |
| **Immunogen:** | A.TL spleen.<br>Donor: A.TH spleen.<br>Fusion Partner: P3-X63-Ag8 |
| **Specificity:** | This Monoclonal antibody is a cytotoxic antibody specific for cells expressing the Ia antigen coded for by the A subregion of the k haplotype. The reaction pattern of this antibody with a panel of inbred and recombinant haplotypes demonstrates that the antibody reacts with Ia.m2, a private specificity of the H-2k haplotype.<br>This antibody can be used to quantitate or to eliminate cells bearing the I-Ak (Ia.m2) antigen. |
| **Formulation:** | PBS containing 0.02% Sodium Azide as preservative and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml<br>Label: FITC<br>State: Liquid purified IgG fraction<br>Label: Fluorescein |
| **Concentration:** | lot specific |
| **Purification:** | Protein G Chromatography |
| **Conjugation:** | FITC |
| **Storage:** | Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.<br>Avoid repeated freezing and thawing.<br>This product is photosensitive and should be protected from light. |
| **Stability:** | Shelf life: one year from despatch. |

View online »

**Database Link:** P01910

**Synonyms:** H2-Aa

Note:

Protocol: **FLOW CYTOMETRY ANALYSIS:**

**Method:**

1. Prepare a cell suspension in media A. For cell preparations, deplete the red blood cell population with Lympholyte®-M cell separation medium.
2. Wash 2 times.
3. Resuspend the cells to a concentration of 2x10e7 cells/ml in media A. Add 50 µl of this suspension to each tube (each tube will then contain 1 x 106 cells, representing 1 test).
4. To each tube, add 1.0 µg* of SM083FS per 10e6 cells.
5. Vortex the tubes to ensure thorough mixing of antibody and cells.
6. Incubate the tubes for 30 minutes at 4°C.

(It is recommended that the tubes are protected from light, since most fluorochromes are light sensitive.)

7. Wash 2 times at 4°C.
8. Resuspend the cell pellet in 50 µl ice cold media B.
9. Transfer to suitable tubes for flow cytometric analysis containing 15 µl of propidium iodide at 0.5 mg/ml in PBS. This stains dead cells by intercalating in DNA.

**Media:**

A. Phosphate buffered saline (pH 7.2) + 5% normal serum of host species + sodium azide (100 µl of 2M sodium
azide in 100 mls).
B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100 µl of 2M sodium azide
in 100 mls).

**Results:**

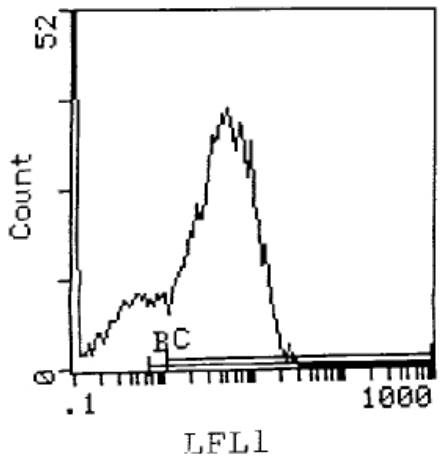
Tissue Distribution by Flow Cytometry Analysis:
Mouse Strain: A.TL
Cell Concentration : 1x10e6 cells per test.
Antibody Concentration Used: 1.0 µg/106 cells.
Isotypic Control: FITC Mouse IgG2a

Cell Source Percentage of cells stained above control:
Thymus: 32.5%
Spleen: 75.4%
Lymph Node: 32.1%
Bone Marrow: 21.6%

Strain Distribution by Flow Cytometry Analysis:

Cell Concentration : 1x10e6 cells per test.
Antibody Concentration Used: 1.0 µg /10e6 cells.

## Product images:




Cell Source: Spleen. Percentage of cells stained above control: 75.4%

Haplotype

| Strain | K | A | B | J | E | C | S | G | D | +/- |
|---|---|---|---|---|---|---|---|---|---|---|
| A.TH | s | s | s | s | s | s | s | s | d | - |
| A.TL | s | k | k | k | k | k | k | k | d | + |
| B10.A | k | k | k | k | k | d | d | d | d | + |
| B10.A(4R) | k | k | b | b | b | b | b | b | b | + |
| B10.BR | k | k | k | k | k | k | k | k | k | + |
| B10.D2 | d | d | d | d | d | d | d | d | d | - |
| C3H/He | k | k | k | k | k | k | k | k | k | + |
| C57BL/6 | | b | b | b | b | b | b | b | b | b - |