

Product datasheet for **SM260B**

Cd8b Mouse Monoclonal Antibody [Clone ID: 3.4.1]

Product data:

Product Type:	Primary Antibodies
Clone Name:	3.4.1
Applications:	FC
Recommended Dilution:	Flow Cytometry, Immunoprecipitation and Western blotting.

Test Results:

Tissue Distribution by Flow Cytometry Analysis:

Rat Strain: Wister.

Cell Concentration: 1x10e6 cells per tests.

Antibody Concentration Used: 0.5 µg/10e6 cells.

Isotypic Control: Biotin Mouse IgG1.

Cell Source : Percentage of cells stained above control:

Thymus : 90.0%

Spleen Cells : 15.2%

Lymph Nodes : 17.0%

Reactivity:	Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Rat/mouse T cell hybrids expressing CD8.
Specificity:	This monoclonal antibody reacts with the beta chain of the CD8 differentiation antigen. The 3.4.1 antibody also blocks both activation in an allogenic response and cell mediated cytotoxicity by CD8 T cells.
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. Label: Biotin State: Liquid purified IgG fraction.
Concentration:	lot specific
Purification:	Protein G Chromatography of Ascites fluid.



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Conjugation:	Biotin
Storage:	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	CD8b molecule
Database Link:	Entrez Gene 24931 Rat P05541
Background:	<p>CD8b is expressed on most thymocytes and mature T cytotoxic/suppressor cells (MHC class I restricted). While the CD8a and CD8b form a heterodimer on the surface of thymocytes and thymus-dependent T cytotoxic/suppressor cells, the majority of NK cells, many CD8 T cells from athymic rats, many activated CD4 T cells, and intestinal epithelium lymphocytes (IEL) express CD8a without CD8b.</p> <p>This suggests that expression of the CD8 heterodimer (a/b) is more dependant on intrathymic T cell maturation than that of the homodimer (a/a). The thymus dependence of CD8a/b T cells may be due to a requirement for thymic selection on self MHC class I antigens.</p>
Synonyms:	CD8B, CD8B1

Note: Protocol: **Flow Cytometry Analysis:**

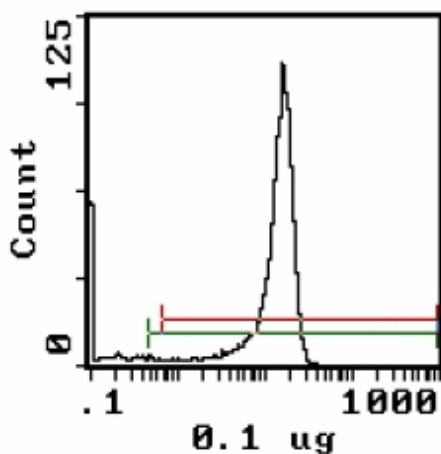
Method:

1. Prepare a cell suspension in media A. For cell preparations, deplete the red blood cell population with Lympholyte®-Rat cell separation medium.
2. Wash 2 times.
3. Resuspend the cells to a concentration of 2×10^7 cells/ml in media A. Add 50 μ l of this suspension to each tube (each tube will then contain 1×10^6 cells, representing 1 test).
4. To each tube, add 50 μ l of a 1.0 μ g* dilution of SM260B or SM260BX per 10^6 cells.
5. Vortex the tubes to ensure thorough mixing of antibody and cells.
6. Incubate the tubes for 30 minutes at 4°C.
7. Wash 2 times at 4°C.
8. Add 100 μ l of secondary antibody PE Streptavidin at 1:500 dilution.
9. Incubate the tubes at 4°C for 30-60 minutes.
(It is recommended that the tubes are protected from light since most fluorochromes are light sensitive).
10. Wash 2 times at 4°C in media B.
11. Resuspend the cell pellet in 50 μ l ice cold media B.
Transfer to suitable tubes for flow cytometric analysis containing 15 μ l 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 μ l of 2M sodium azide in 100 mls).
- B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100 μ l of 2M sodium azide in 100 mls).

Product images:



Cell Source: Thymus. Percentage of cells stained above control: 90.0%. Representative Histogram