

Product datasheet for SM260RX

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OriGene Technologies, Inc.

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: Wistar.

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

Isotypic Control: PE Mouse IgG1, k.

<u>Cell Source</u>: Percentage of cells stained above control:

Thymus: 92.2% Spleen Cells: 14.6% Lymph Nodes: 40.3%

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: PE

State: Liquid purified IgG fraction.

Concentration: lot specific

Purification: Protein G Chromatography of Ascites fluid.



Stability:

Cd8b Mouse Monoclonal Antibody [Clone ID: 3.4.1] - SM260RX

Conjugation: PE

Storage: Store the antibody undiluted at 2-8°C.

DO NOT FREEZE!.

Avoid prolonged exposure to light. Shelf life: one year from despatch.

Gene Name: CD8b molecule

Database Link: Entrez Gene 24931 Rat

P05541

Background: 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.

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.

Synonyms: CD8B, CD8B1

Note: Protocol: Flow Cytometry Analaysis:

Method:

- 1. Prepare a cell suspension in media A. For cell peparations, deplete the red blood cell population with Lympholyte®-Rat cell separation medium.
- 2. Wash 2 times.
- 3. Resuspend the cells to a concentration of 2x10e7 cells/ml in media A. Add 50 μ l of this suspension to each tube (each tube will then contain 1x10e6 cells, representing 1 test).
- 4. To each tube, add 1.0 μg* dilution of SM260RX per 10e6 cells.
- 5. Vortex the tubes to ensure thorough mixing of antibody and cells.
- 6. Incubate the tubes at 4°C for 30 minutes.

(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 μ l of propidium iodide at 0.5 mg/ml in PBS. This stains dead cells by intercalating in DNA.

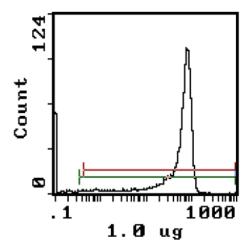
Media:

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: 92.2%