

## **Product datasheet for SM260FX**

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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: Wister.

Cell Concentration: 1x10e6 cells per tests. Antibody Concentration Used: 0.5 µg/10e6 cells.

Isotypic Control: FITC Mouse IgG1.

<u>Cell Source</u>: 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: FITC

State: Liquid purified IgG fraction.

**Concentration:** lot specific

**Purification:** Protein G Chromatography of Ascites fluid.





### Cd8b Mouse Monoclonal Antibody [Clone ID: 3.4.1] - SM260FX

Conjugation: FITC

**Storage:** Store the antibody undiluted at 2-8°C for one month or (in alquots) 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: 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®-M cell separation medium.
- 2. Wash 2 times.
- 3. Resuspend the cells to a concentration of 2x10e7 cells/ml in media A. Add 50  $\mu$ l of this suspension to each tube (each tube will then contain 1x10e6 cells, representing 1 test).
- 4. To each tube, add 0.1-0.5 μg\* of SM260FX 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 flurochromes 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  $\mu$ l of propidium iodide at 0.5 mg/ml in PBS. This stains dead cells by intercalating in DNA.

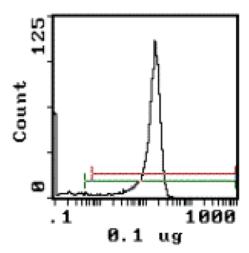
#### Media:

A. Phosphate buffered saline (pH 7.2) + 5% normal serum of host species + sodium azide (100  $\mu$ l of 2M sodium azide in 100 mls).

B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100  $\mu$ l of 2M sodium azide in 100 mls).



# **Product images:**



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