

Product datasheet for **CL007FX**

Cd8a Rat Monoclonal Antibody [Clone ID: YTS169.4]

Product data:

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| Product Type: | Primary Antibodies |
| Clone Name: | YTS169.4 |
| Applications: | FC, IHC |
| Recommended Dilution: | Flow Cytometry. Immunohistochemistry on frozen sections. |
| Reactivity: | Mouse |
| Host: | Rat |
| Isotype: | IgG2b |
| Clonality: | Monoclonal |
| Immunogen: | Murine thymocytes |
| Specificity: | Antibody CL007 reacts with a protein of approximately 30 kDa found on mouse thymocytes and mouse cytotoxic/ suppressor T cells. It does not bind to mouse helper/inducer T cells. It binds to T lymphocytes from all mouse strains regardless of phenotypic expression (i.e. reacts with T lymphocytes from mouse strains expressing the Ly 2.1 or Ly 2.2 phenotype). It can be used to investigate the role of T cells in models for infectious disease, autoimmunity, transplantation tolerance and fundamental aspects of immunology. |
| Formulation: | PBS, 0.02% NaN3 and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml. Label: FITC State: Liquid purified IgG |
| Concentration: | lot specific |
| Purification: | Protein G Chromatography |
| Conjugation: | FITC |
| Storage: | Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing. |
| Stability: | Shelf life: one year from despatch. |
| Gene Name: | CD8 antigen, alpha chain |



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Database Link: [Entrez Gene 12525 Mouse P01731](#)

Background: The CD8 antigen is a cell surface glycoprotein found on most cytotoxic T lymphocytes that mediates efficient cell to cell interactions within the immune system. The CD8 antigen, acting as a coreceptor, and the T cell receptor on the T lymphocyte recognize antigen displayed by an antigen presenting cell (APC) in the context of class I MHC molecules. The functional coreceptor is either a homodimer composed of two alpha chains, or a heterodimer composed of one alpha and one beta chain. Both alpha and beta chains share significant homology to immunoglobulin variable light chains.

Synonyms: CD8 alpha chain, CD8A, MAL

Note: Strain Distribution by Flow Cytometry Analysis:
Procedure: see below
Cell Concentration: 1x10e6 cells per test
Antibody Concentration Used: 0.1 µg/10e6 cells
Strains Tested: BALB/c, C57BL/6
Positive: BALB/c, C57BL/6
Negative: non

Protocol: FLOW CYTOMETRY ANALYSIS:

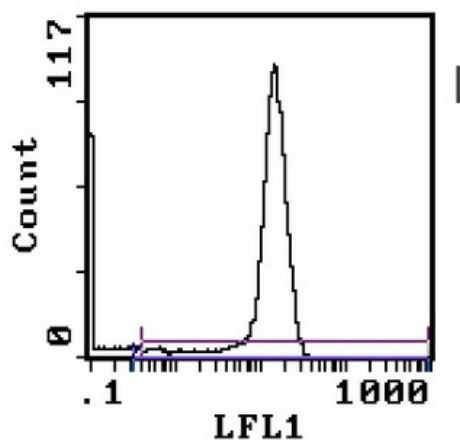
Method:

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 2x10⁷ cells/ml in media A. Add 50µl of this suspension to each tube (each tube will then contain 1 x 10⁶ cells, representing 1 test).
4. To each tube, add 0.1-0.5 µg* of CL007F per 106 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 fluorochemicals 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).

Product images:



Tissue Distribution by Flow Cytometry Analysis:
Mouse Strain: BALB/c Cell Concentration: 1×10^6
cells per test Antibody Concentration Used: 0.1
ug/ 10^6 cells Isotypic Control: FITC Rat IgG2b Cell
Source Percentage of cells stained above
control:Thymus 74.4%