

## Product datasheet for **CL007F**

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

#### Product data:

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



[View online »](#)

**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:

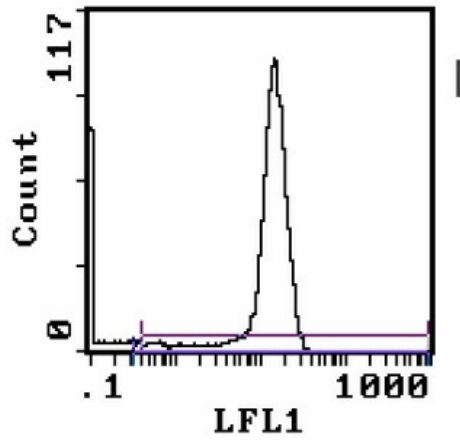
Method:

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 2x10<sup>7</sup> cells/ml in media A. Add 50µl of this suspension to each tube (each tube will then contain 1 x 10<sup>6</sup> 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: 1x10<sup>6</sup>  
cells per test Antibody Concentration Used: 0.1  
ug/10<sup>6</sup> cells Isotypic Control: FITC Rat IgG2b Cell  
Source Percentage of cells stained above  
control:Thymus 74.4%