

## Product datasheet for **CL008R**

### Cd8a Rat Monoclonal Antibody [Clone ID: CT-CD8a]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	CT-CD8a
Applications:	FC
Recommended Dilution:	Flow Cytometry Analysis (see Protocols). (Reported to be useful in immunohistochemistry on acetone-fixed frozen sections.)
Reactivity:	Mouse
Host:	Rat
Isotype:	IgG2a
Clonality:	Monoclonal
Specificity:	This anti-mouse CD8a antigen monoclonal antibody recognizes the mouse CD8 $\alpha$ chain. The $\alpha$ chain of CD8 associates with the CD8 $\beta$ chain to form a CD8 $\alpha/\beta$ heterodimer that is expressed by the majority of thymocytes and by the MHC class I restricted subset of mature T cells <sup>1</sup> . Mouse CD8 $\alpha$ can also form a CD8 $\alpha/\alpha$ chain homodimer on subsets of CD8 positive cells. For this reason, antibodies specific for CD8a rather than CD8b are recommended for a rigorous delineation of CD8 positive cells.
Formulation:	PBS, 0.1% sodium azide (NaN <sub>3</sub> ) and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml Label: PE State: Liquid purified IgG
Concentration:	lot specific
Conjugation:	PE
Storage:	Store the antibody undiluted at 2-8°C. DO NOT FREEZE! This product is photosensitive and should be protected from light.
Stability:	Shelf life: one year from despatch.
Gene Name:	CD8 antigen, alpha chain
Database Link:	<a href="#">Entrez Gene 12525 Mouse P01731</a>



[View online »](#)

**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:** 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  $2 \times 10^7$  cells/ml in media A. Add 50  $\mu$ l of this suspension to each tube (each tube will then contain  $1 \times 10^6$  cells, representing 1 test).
4. To each tube, add  $\sim 1.0 \mu\text{g}^*$  of this Ab per  $1 \times 10^6$  cells.
5. Vortex the tubes to ensure thorough mixing of antibody and cells.
6. Incubate the tubes for 30 minutes at 4°C. (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  $\mu$ l 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).

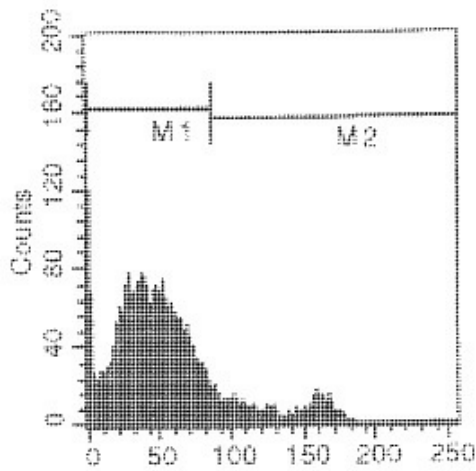
**Results:**

Mouse Strain: BALB/c

Cell Concentration:  $1 \times 10^6$  cells per test

Antibody Concentration Used: 1.0  $\mu\text{g}/10^6$  cells

Product images:



Representative Histogram - Isotypic Control: PE  
Rat IgG2a Percentage of cells stained above  
control: 13.04%