



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

# TECHNICALLY *Speaking*

Place your order with CEDARLANE® or your local distributor.

*Please contact CEDARLANE® for lot specific information.*

## **PE Anti-Rat CD8b Monoclonal Antibody**

**CL091PE  
CL091PE-4  
LOT: 9151**

### **DESCRIPTION:**

Cedarlane's anti-rat CD8b monoclonal antibody reacts with the beta chain of the CD8 differentiation antigen. 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.

Reported applications for this antibody include flow cytometry, immunoprecipitation and Western blotting. The 3.4.1 antibody also blocks both activation in an allogenic response and cell mediated cytotoxicity by CD8 T cells.

### **PRESENTATION:**

50 µg (CL091PE) or 200µg (CL091PE-4) R-PE conjugated Ig buffered in PBS, 0.02% NaN<sub>3</sub> and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml.

### **STORAGE/STABILITY:**

Store at 4°C. **DO NOT FREEZE.** Avoid prolonged exposure to light.

For more information or to place an order please contact...

**CEDARLANE®**  
**LABORATORIES LIMITED**  
5516 - 8th Line, R.R.#2, Hornby, Ontario, CANADA L0P 1E0



**toll free: 1-800-268-5058**  
**in North America**

**phone: (905) 878-8891 • fax: (905) 878-7800**

or visit our website for a list of our international distributors including contact information

**website: [www.cedarlanelabs.com](http://www.cedarlanelabs.com) • e-mail: [info@cedarlanelabs.com](mailto:info@cedarlanelabs.com)**

## **SPECIFICATIONS**

Clone: 3.4.1

Hybridoma Production:

Immunization:

Immunogen: Rat/mouse T cell hybrids expressing CD8  
Donor: BALB/c mouse spleen cells

Fusion Partner: X63 Ag.653 myeloma cell line

Specificity: Rat CD8b

Ig Class: mouse IgG<sub>1,k</sub>

Format: R-PE conjugated Ig buffered in PBS, 0.02% NaN<sub>3</sub> and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml. (Purified from ascitic fluid via Protein G Chromatography)

Antibody Concentration: 0.1 mg/ml

## **FLOW CYTOMETRY ANALYSIS:**

Method:

1. Prepare a cell suspension in media A. For cell preparations, deplete the red blood cell population with Lympholyte<sup>®</sup>-Rat cell separation medium (CL5040).
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 1.0  $\mu$ g\* of **CL091PE or CL091PE-4** per  $10^6$  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:

Tissue Distribution by Flow Cytometry Analysis:

Rat Strain: Wistar

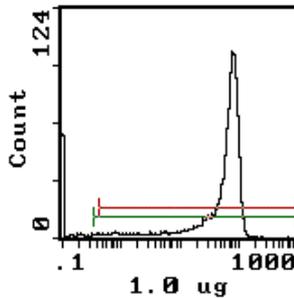
Cell Concentration :  $1 \times 10^6$  cells per test

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

Isotypic Control: PE Mouse IgG<sub>1</sub>, k (CLCMG104)

\* (T cells isolated with CL102 Cedarlane's Rat T Cell Recovery Column Kit)

<u>Cell Source</u>	<u>Percentage of cells stained above control:</u>
Thymus	92.2%
Spleen	14.6%
Lymph Node	40.3%



Cell Source: Thymus

Percentage of cells stained above control: 92.2%

**N.B. Appropriate control samples should always be included in any labelling studies.**

**\*For optimal results in various applications, it is recommended that each investigator determine dilutions appropriate for individual use.**

R-Phycoerythrin conjugates are produced under license and protected under Stanford University held patents 4,520,110; 4,542,104; 4,859,582; 5,055,556 (U.S.); 76695 (EPC); 548440 (Australia); 1,179,942 (Canada); and 1,594,827 (Japan).

**REFERENCES:**

1. Elflein, K., Rodriguez-Palmero, M., Kerkau, T., and T. Hunig. (2003) Immunobiology, 102, 1764 -1770. Rapid recovery from T lymphopenia by CD28 superagonist therapy.
2. Torres-Nagel, N., Kraus, E., Brown, M.H., Tiefenthaler, G., Mitnacht, R., Williams, A.F., and T. Hunig. (1992) Eur. J. Immunol. 22, 2841-2848. Differential thymus dependence of rat CD8 isoform expression\*.

**FOR RESEARCH USE ONLY**

® is a Registered Trademark of Cedarlane Laboratories Limited.