



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### 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)

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for the Science of Tomorrow™

**Anti-Rat CD90 (Thy 1.1)  
Monoclonal Antibody**

Catalogue#	Format	Size	Concentration	Isotype Control
CL005A	Ascites	0.5 ml	N/A	CLCMG100
CL005AP/-2	Purified	250µg/500 µg	1.0 mg/ml	CLCMG100
CL005LE/-2	Purified	500 µg /1mg	1.0 mg/ml	CLCMG100
CL005NA	Purified	1 mg	1.0 mg/ml	CLCMG100
CL005B/-5	Biotin	100µg/500 µg	0.1 mg/ml	CLCMG115
CL005F/-5	FITC	100µg/500 µg	0.1 mg/ml	CLCMG101
CL005PE/-4	PE	50µg/200 µg	0.1 mg/ml	CLCMG104
CL005AF4	Alexa Fluor <sup>®</sup> 488	100 µg	0.1 mg/ml	N/A

Alexa Fluor<sup>®</sup> is a registered trademark of Life Technologies Corporation.

Ig Class: Mouse IgG<sub>1</sub>

**DESCRIPTION:**

Cedarlane's anti-rat CD90 (Thy 1.1) monoclonal antibody recognizes the Thy 1.1 antigenic determinant on rat as well as mouse cells. This particular determinant has been defined to be monomorphic within rats but polymorphic in the mouse. CL005 antibody reacts with Thy 1.1 mice (ie. AKR) but not Thy 1.2 mice (ie. CBA, BALB/c). The affinity of the F(ab) fragment of CL005 antibody for rat Thy-1.1 is  $3 \times 10^9 \text{ M}^{-1}$  and for mouse Thy 1.1 is  $3 \times 10^8 \text{ M}^{-1}$  (1). The Thy-1.1 antigen is found on a variety of cell types including thymocytes, neuronal cells (mouse, rat) (8), T and immature B cells (rat), breast epithelial cells (rat) (6), and connective tissue (2). CL005 antibody has been used to determine that the Thy 1.1 molecule is a glycoprotein with 112 amino acids which is homologous to immunoglobulin domains (3). The Thy-1 antigen is found on a diversity of cell types (4) and thus it can be used as a cell marker. Furthermore, the binding characteristics of CL005 antibody have been extensively studied (1) and this appears to be an excellent antibody for studying the killing of Thy-1.1 positive tumour cells with Ab-toxin conjugates (5). In addition, the antibody can be coupled to Sepharose-4B and used to effectively purify mouse Thy 1.1 and rat Thy-1.1 antigens. This clone has been reported to work in immunohistochemistry (frozen sections).

**PRESENTATION:**

**Ascites:** 0.5ml Lyophilized.

**Purified:** Purified IgG buffered in PBS and 0.02% NaN<sub>3</sub>. (Purified from ascitic fluid via Protein G Chromatography). For maximal recovery of contents, please quick-spin vial before opening.

**LE:** Purified Ig buffered in PBS, no preservative, 0.2µm sterile filtered. (Purified from cell culture supernatant via Protein G Chromatography)

**No Azide:** Purified Ig buffered in PBS, no preservative, 0.2µm sterile filtered. (Purified from ascitic fluid via Protein G Chromatography)

**Biotin, FITC, PE and AF488:** Biotin/FITC/PE/AF488 conjugated IgG 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:**

For all formats, store at 4°C. DO NOT FREEZE PE and AF488 conjugates. For long term storage (Ascites, Purified, LE, NA, Biotin and FITC), aliquot and freeze unused portion at -20°C in volumes appropriate for single usage. Avoid freeze/thaw cycles.

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registered company.

In CANADA: Toll Free: 1-800-268-5058

4410 Paletta Court, Burlington, ON L7L 5R2 ph: (289) 288-0001, fax: (289) 288-0020  
e-mail: [general@cedarlanelabs.com](mailto:general@cedarlanelabs.com)

In the USA: Toll Free: 1-800-721-1644

1210 Turrentine Street, Burlington, NC 27215 ph: (336) 513-5135, fax: (336) 513-5138  
e-mail: [service@cedarlanelabs.com](mailto:service@cedarlanelabs.com)

## **SPECIFICATIONS:**

**Clone:** MRC OX-7

### **Hybridoma Production:**

**Immunization:** Immunogen: Rat thymocyte Thy-1 antigen  
Donor: BALB/c spleen  
**Fusion Partner:** P3-NS1-Ag4(NS1/1)

**Specificity:** Rat CD90 (Thy 1.1), cross reacts with mouse CD90 (Thy 1.1)

## **TEST RESULTS:**

### **Tissue Distribution by Flow Cytometry Analysis:**

**Rat Strain:** Wistar

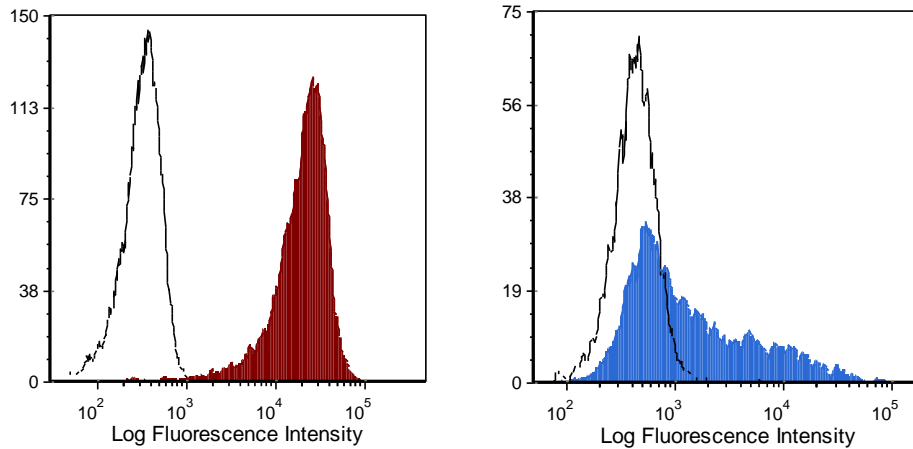
**Cell Concentration:**  $1 \times 10^6$  cells per test

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

### **Cell Source**

### **Percentage of cells stained above control:**

Thymus	99.26%
Spleen	4.82%
Lymph Node	8.58%



Wistar rat thymocytes (left) and splenocytes (right) were stained with anti-CD90 (clone: OX-7) (filled histogram) or mouse IgG1,  $\kappa$  isotype control (open histogram).

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

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

## **REFERENCES:**

- 1) Mason, D.W. and A.F. Williams. (1980) Biochemical J. 187, 1-20. The Kinetics of antibody binding to membrane antigens in solution and at the cell surface.
- 2) Campbell, D.G., Gagnon, J., Reid, K.B.M. and A.F. Williams. (1981) Biochemical J. 195, 15-30. Rat brain Thy 1 glycoprotein.
- 3) Williams, A.F. and J. Gagnon. (1982) Science 216, 696-703. Neuronal cell thy 1 glycoprotein: homology with immunoglobulin.
- 4) Williams, A.F., Barclay, A.N., Letarte-Muirhead, M. and R.J. Morris. (1976). Coldspring Harbour Symposium on Qualitative Biology. 41, 51-61. Rat Thy 1 antigen from thymus and brain: their tissue distribution, purification and chemical composition.
- 5) Neville, D.M. and R.J. Youle. (1982) Immunol. Review 62, 75. Monoclonal antibody ricin or ricin-A chain hybrids: kinetic analysis of cell killing for tumour therapy.
- 6) Dulbecco, R., Bologna, M. and M. Unga. (1979) Proc. Nat'l Acad. Sci. 76, 1948. Role of Thy 1 antigen in the *in vitro* differentiation of rat mammary cell line.
- 7) Raff, M.C. (1971) Transplan. Rev. 6, 52-80. Surface antigenic markers for distinguishing T and B lymphocytes in mice.
- 8) Barclay, A.N. and H. Hyden. (1978) J. Neurochem. 31, 1375-1391. Localization of the Thy 1 antigen in rat brain and spinal cord by immunofluorescence.
- 9) Hunt, S.B., Mason, D.W. and A.F. Williams. (1977) Eur. J. Immuno. 7, 817-823. In rat bone marrow thy 1 antigen is present on cells with membrane immunoglobulin and on precursors of peripheral B lymphocytes.
- 10) Van Dijk A, Naaijken BA, Jurgens WJ, Nalliah K, et al. (2011) Reduction of infarct size by intravenous injection of uncultured adipose derived stromal cells in a rat model is dependent on the time point of application. Stem Cell Res. 7(3):219-29.
- 11) Luan X, Ito Y, Dangaria S, Diekwisch TG. (2006) Dental follicle progenitor cell heterogeneity in the developing mouse periodontium. Stem Cells Dev. 15(4):595-608.
- 12) Laping NJ, Olson BA, Zhu Y. (2001) Identification of a novel nuclear guanosine triphosphate-binding protein differentially expressed in renal disease. J Am Soc Nephrol. 12(5):883-90.

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