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

www.szabo-scandic.com

linkedin.com/company/szaboscandic

Anti-Rat CD4
Monoclonal Antibody

Catalogue#	Format	Size	Concentration	Isotype Control
CL003A	Ascites	0.5ml	NA	CLCMG100
CL003AP/-2	Purified	250µg/500µg	1.0 mg/ml	CLCMG100
CL003NA	Purified	1.0ml	1.0 mg/ml	CLCMG100
CL003B/-5	Biotin	100µg/500µg	0.1 mg/ml	CLCMG115
CL003F/-5	FITC	100µg/ 500µg	0.1 mg/ml	CLCMG101
CL003APC	APC	100µg	0.1 mg/ml	CLCMG105
CL003PE/-4	PE	50µg/ 200µg	0.1 mg/ml	CLCMG104
CL003AF4	Alexa Fluor®488	100 µg	0.1 mg/ml	N/A
CL003AF7	Alexa Fluor®700	100 µg	0.1 mg/ml	N/A

Alexa Fluor® is a registered trademark of Life Technologies Corporation.

Isotype: Mouse IgG_1

DESCRIPTION:

Cedarlane's anti-rat CD4 monoclonal antibody recognizes a determinant on the majority of thymocytes (90-95%), a subset of peripheral T cells and peritoneal macrophages. (1,2,3,10) The antigen recognized by this antibody is a surface glycoprotein of Mr 48,000-52,000 and is the homologue of the human CD4 and the mouse L3/T4 antigen. CL003 labels the rat T helper subset, which mediates the helper activity for B and T cells, graft vs. host (GVH) reactivity and produces IL-2 in the mixed lymphocyte reaction (MLR). (2,4,6,) Addition of CL003 to the MLR, inhibited proliferation and blocks the production of IL-2. (4,5,6,9) T cells which mediate cytotoxicity and suppressor functions are not labelled. (Thus, cells labelled by this antibody are not labelled by MRC OX-8.)

CL003 is invaluable for separating T cell subsets for functional studies and for labelling cells in tissue sections. It has been used in studing the role of T lymphocytes in graft rejections (7) and in studying the subsets of T cells in the rat which mediate graft vs. host disease. (8)

This particular antibody is also one of three antibodies which labels T lymphocyte populations in the rat. These clones include W3/13 (CL002), which labels all T cells as well as MRC OX-8 (CL004) and W3/25 (CL003) which label non-overlapping T cell subpopulations. These monoclonal antibodies used in concert are being employed extensively to investigate cellular aspects of the immune response in rats and prove to be useful as markers for functionally distinct subpopulations of lymphocytes.

This clone is reported to work with frozen and paraffin sections (11) and in functional testing (12).

PRESENTATION:

Ascites: Lyophilized

Purified: Purified IgG buffered in PBS and 0.02% NaN_3. (Purified from ascitic fluid via Protein G Chromatography). For maximum recovery of contents, spin down tube before use.

Biotin, FITC, PE, APC, AF488 and AF700: Biotin/FITC/PE/APC/AF488/AF700 conjugated IgG buffered in PBS, 0.02% NaN_3 and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml.

No Azide: Purified Ig buffered in PBS, no preservative, 0.2µm sterile filtered.

Continued Overleaf….

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

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

STORAGE/STABILITY:

Store **Ascites** at -20°C. For all other formats, store at 4°C. DO NOT FREEZ **APC**, **PE, AF488 and AF700** conjugates. For long term storage (**Purified, No Azide, Biotin** and **FITC**), aliquot and freeze unused portion at -20°C in volumes appropriate for single usage. Avoid freeze/thaw cycles.

SPECIFICATIONS:

Clone: W3/25
Hybridoma Production:
Immunization: Immunogen: Rat thymocyte membrane
Donor: BALB/c spleen
Fusion Partner: P3-NSI-1-Ag4 (NSI/1)
Specificity: Rat CD4

TEST RESULTS:

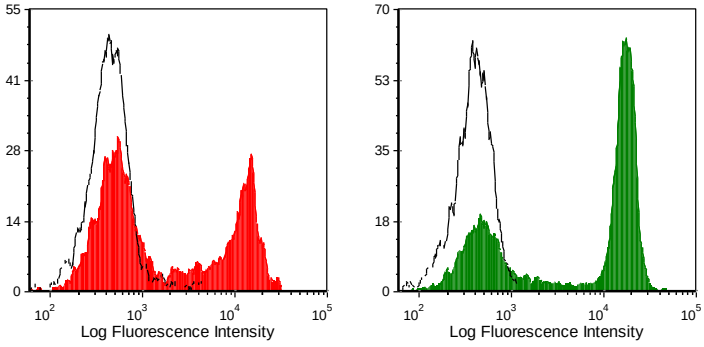
Tissue Distribution by Flow Cytometry Analysis:

Rat Strain: Buffalo

Cell Concentration: $1x10^6$ cells per tests

Antibody Concentration Used: 0.5 µg/10^6 cells

Cell Source	Percentage of cells stained above control:
Thymus	97.0%
Spleen	37.0%
Lymph Node	67.0%



Wistar rat splenocytes (left) or lymph nodes (right) were stained with anti-CD4 (clone: W3/25) (filled histogram) or mouse IgG1 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. Williams, A.F., Galfre, G. and C. Milstein. (1977) Cell, 12, 633-673. Analysis of cell surfaces by xenogenic myeloma-hybrid antibodies: Differentiation antigens of rat lymphocytes.
2. Brideau, R.J., Carter, P.B., McMaster, W.R., Mason, D.W. and A.F. Williams. (1980) Eur. J. of Immunol., 10, 609-615. Two subsets of Rat T Lymphocytes defined with monoclonal antibodies.
3. Barclay, A.N. (1981) Immunology, 42, 593-600. The Localization of populations of lymphocytes defined with monoclonal antibodies in rat lymphoid tissues.
4. Cantrell, D.A., Robins, R.A. and R.W. Baldwin. (1982) Cell Immunol. 70, 367-372. Rat lymphocyte subsets: Cellular requirements for the generation of T-cell growth factors.
5. Mason, D.W., Pugh, C.W. and M. Webb. (1981) Immunology, 44, 75-87. The Rat Mixed Lymphocyte Reaction:Roles of a dendritic cell in intestinal lymph and T-Cell subsets defined by monoclonal antibodies.
6. Webb, M., Mason, D.W. and A.F. Williams. (1979) Nature, 282, 841-843. Inhibition of mixed lymphocyte response by monoclonal antibody specific for rat T lymphocyte subset.
7. Dallman, M.J., Mason, D.W. and M. Webb. (1982) Eur. J. Immunol. 12, 511-518. The role of host and donor cells in the rejection of skin allografts by T cell deprived rats injected with syngenic T cells.
8. Mason, D.W. (1981) Transplantation, 32, 222-226. Subsets of T cells in the rat mediating lethal graft vs. host disease.
9. White, R.A.H., Mason, D.W., Williams, A.F., Galfre, G. and C. Milstein. (1978) J. Exp. Med. 148, 644-673. T Lymphocyte heterogeneity in the rat: Separation of functional sub-populations using a monoclonal antibody.
10. Jefferies, W.A., Green, J.R. and A.F. Williams. (1985) J. Exp. Med. 162, 117-127. Authentic T Helper CD4 (W3/25) antigen on rat peritoneal macrophages.
11. Whiteland, J.L et al (1995). Immunohistochemical detection of T cell subsets and other leukocytes in paraffin embedded rat and mouse tissues with monoclonal antibodies .J. Histochem. Cytochem. 43: 313-320.
12. Tamatani, T. et al. (1991) Characterization of the rat leukocyte integrin, CD11/CD18, by the use of LFA-1 subunit-specific monoclonal antibodies. Eur. J. Immunol. 21:627-633.

FOR RESEARCH USE ONLY

JK 04/02/19