SZABO SCANDIC

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# Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

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## Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

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- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand


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# TECHNICALLY Speaking

Place your order with CEDARLANE® or your local distributor.

*Please contact CEDARLANE® for lot specific information.*

## PE Anti-Mouse CD49d Monoclonal Antibody

**CL8919PE**
**CL8919PE-3**
**LOT:1957**

**DESCRIPTION:**

Cedarlane's anti-mouse CD49d monoclonal antibody reacts with α4 integrin, which helps to mediate cell-cell and cell-matrix interactions.
α4 integrin combines with β1 and β7 integrin to form VLA-4 and LPAM-1 (Peyers patch homing receptor) respectively. VLA-4 is expressed on most peripheral lymphocytes, thymocytes and monocytes. LPAM-1 is found on peripheral lymphocytes, but few thymocytes. Fibronectin and VCAM-1 act as ligands for both VLA-4 and LPAM-1. LPAM-1 also binds the mucosal vascular addressin MAdCAM-1. (1)

Applications of this clone include flow cytometry, immunoprecipitation and immunohistochemistry. (1,2,3)

**PRESENTATION:**

50 µg (CL8919PE) or 300 µg (CL8919PE-3) PE conjugated Ig 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.

**STORAGE/STABILITY:**

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

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

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**SPECIFICATIONS:**

Clone: R1-2

Hybridoma Production:

Immunization: Immunogen: Peyers Patch HEV binding lymphoma line (TK1)
Donor: Fisher Spleen

Fusion Partner: P3x63Ag8.653

Specificity: Mouse CD49d ($\alpha$4 integrin)

Ig Class: Rat $IgG_{2b}$

Format: PE conjugated Ig 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. (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®-M cell separation medium (CL5030).
2. Wash 2 times.
3. Resuspend the cells to a concentration of $2x10^7$ cells/ml in media A. Add 50 µl 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 µg***** of **CL8919PE or CL8919PE-3** 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 flurochromes 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:

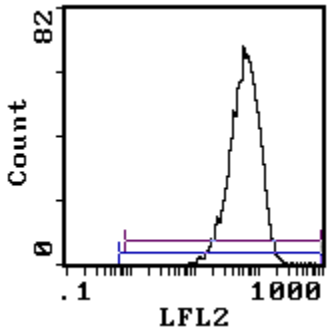
A. Phosphate buffered saline (pH 7.2) + 5% normal serum of host species + sodium azide (100 µl of 2M sodium azide in 100 mls).
B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100 µl of 2M sodium azide in 100 mls).

Results:

Tissue Distribution by Flow Cytometry Analysis:

Mouse Strain: BALB/c
Cell Concentration : $1x10^6$ cells per tests
Antibody Concentration Used: 1.0 µg/$10^6$ cells
Isotypic Control: PE Rat $IgG_{2b}$

| Cell Source | Percentage of cells stained above control: |
|---|---|
| TK1 cell line | 100% |
| Thymus | 93.5% |
| Spleen | 92.7% |
| Bone Marrow | 88.0% |




Cell Source: TK1 cell line
Percentage of cells stained above control: 100%

**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.**

Strain Distribution by Flow Cytometry Analysis:

Procedure: see page
Cell Concentration : $1x10^6$ cells per tests
Antibody Concentration Used:1.0 µg /$10^6$ cells
Strains Tested: BALB/c, C57BL/6, C3H/He, CBA/J, AKR
Positive: BALB/c, C57BL/6, C3H/He, CBA/J, AKR
Negative: none

**REFERENCES:**

1) Berlin, C., E. L. Berg, M. J. Briskin, D. P. Andrew, P. J. Kilshaw, B. Holzmann, I. L. Weissman, A. Hamann, E.C. Butcher 1993. α4β7 integrin mediates lymphocyte binding to the mucosal vascular addressin MAdCam-1. Cell 704:185-195
2) Holzmann, B., I.. L. Weissman 1989. Peyer's patch-specific lymphocyte homing receptors consist of a VLA-4 like α chain associated with either of two integrin β chains, one of which is novel. EMBO 8:1736-1741
3) Holzmann, B., B. W. McIntyre, I. W. Weissman 1989. Identification of a murine Peyer's patch-specific lymphocyte homing receptor as an integrin molecule with an α chain homologous to human VLA-4α. Cell 56:37-46

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