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Quellenstraße 110, A-1100 Wien

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

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FITC Anti-Mouse Macrophage (F4/80) Monoclonal Antibody

CL8940F CL8940F-3 LOT: 14011206

DESCRIPTION:

Cedarlane's anti-mouse F4/80 monoclonal antibody reacts with the mouse macrophage F4/80 antigen, which is a 160 kD plasma membrane component on mouse mononuclear phagocytes. The F4/80 antigen is found on most macrophages, and on macrophage precursors from M-CFC onward. Expression of this antigen is increased upon maturation. F4/80 is found in low levels on activated macrophages and eosinophils. Dendritic leukocytes may be negative or express F4/80 in low levels.

Applications include flow cytometry^{7,8,9,11}. This clone is also reported to work in immunohistochemistry, both frozen and paraffin sections^{5,12}, and ELISA¹¹.

PRESENTATION:

 $100 \mu g$ (CL8940F) or $300 \mu g$ (CL8940F-3) FITC conjugated Ig buffered in PBS, 0.1% sodium azide (NaN₃) and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml.

STORAGE/STABILITY:

Store at 4°C. For long term storage, aliquot and freeze unused portion at -20°C in volumes appropriate for single usage. Avoid freeze/thaw cycles and prolonged exposure to light. If the reagent is being diluted, it is recommended that only the quantity to be used within one week be diluted.

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SPECIFICATIONS:

Clone: C1:A3-1

Specificity: Mouse Macrophage (F4/80)

Ig Class: Rat IgG_{2b}

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 μ l of this suspension to each tube (each tube will then contain 1×10^6 cells, representing 1 test).
- 4. To each tube, add 1.0 μ g* of **CL8940F or CL8940F-3** per 10⁶ 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 µl ice cold media B.
- 9. Transfer to suitable tubes for flow cytometric analysis containing 15 μ 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 μ l of 2M sodium azide in 100 mls).
- B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100 μ l of 2M sodium azide in 100 mls).

Results:

<u>Tissue Distribution by Flow Cytometry Analysis:</u>

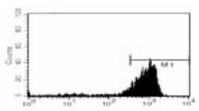
(Representative Histogram)

Mouse Strain: BALB/c

Cell Concentration : $1x10^6$ cells per test Antibody Concentration Used: $1.0 \mu g/10^6$ cells

Isotypic Control: FITC Rat IgG₂₆

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Cell Source: Peritoneal Macrophage
Percentage of cells stained above control: 84.0%

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.

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