CL083B

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Monoclonal Antibody to T-Cell Receptor TCR Vb 11 - Biotin

Alternate names: TCR V beta11, TCR Vb11

Catalog No.: CL083B

Quantity: 0.1 mg

Concentration: 0.1 mg/ml

Host / Isotype: Rat / IgG2b

Recommended Isotype Controls: SM19B

Clone: CTVB11

Format:
State: Liquid purified Ig fraciton
Buffer System: PBS, 0.09% NaN3 and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml.
Label: Biotin

Applications:
Flow Cytometry (protocol see below). Appropriate control samples should always be included in any labelling studies.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:
This antibody reacts with the TCR Vb11 bearing T cells. TCR Vb11 may be deleted in mouse strains expressing the MHC class II I-E antigens.
Tissue Distribution by Flow Cytometry Analysis:
Mouse Strain: C3H.SW
Cell Concentration : 1x10e6 cells per tests
Antibody Concentration Used: 1.0 µg/10e6 cells
Isotypic Control: Biotin Rat IgG2b.
Species: Mouse.
Other species not tested.

Storage:
Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:
1. Tomonari, K. and Lovering, E. 1989 T cell receptor-specific monoclonal antibodies against a Vb11-positive mouse T cell clone. Immunogentics 28:445-451.
2. Pircher, H., Ohashi, P., Miescher, G., Lang, R., Zikopoulos, A., Burki, K., Mak, T. W., MacDonald, H.R. and Hengartner, H. 1990 T cell receptor (TCR) b chain transgenic mice: studies on allelic exclusion and the TCR+ gamma/ delta population. Eur. J. Immunol. 20:417-424.
3. Bill J, Kanagawa O, Woodland DL, Palmer E. The MHC molecule I-E is necessary but not

sufficient for the clonal deletion of V beta 11-bearing T cells. J Exp Med. 1989 Apr 1;169(4):1405-19. PubMed PMID: 2538552.
4. Gao, E., Kanagawa, O. and Sprent, J. 1989 Capacity of unprimed CD4+ and CD8+ T cells expressing Vb11 receptors to respond to I-E alloantigens in vivio. J. Exp Med. 170: 1947-1957.

Protocols:

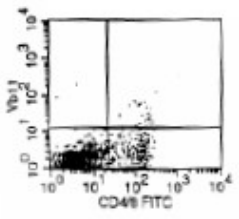
FLOW CYTOMETRY ANALYSIS:

Method:

1.Prepare a cell suspension in media A. For cell preparations, deplete the red blood cell population.
2. Wash 2 times.
3. Resuspend the cells to a concentration of 2x10e7 cells/ml in media A. Add 50 µl of this suspension to each tube (each tube will then contain 1 x 10e6 cells, representing 1 test).
4. To each tube, add ~1.0 µg of this antibody per 10e6 cells.
5. Vortex the tubes to ensure thorough mixing of antibody and cells.
6. Incubate the tubes for 30 minutes at 4°C.
7. Wash 2 times at 4°C.
8. Add 100 µl of secondary antibody (Streptavidin-PE) at a 1:50 dilution.
9. Incubate tubes at 4°C for 30 - 60 minutes (It is recommended that tubes are protected from light since most fluorochromes are light sensitive).
10. Wash 2 times at 4°C.
11. Resuspend the cell pellet in 50 µl ice cold media B.
12. 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).

Pictures:



Cell Source: Spleen
Percentage of cells stained above control: 1.38%