

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

Alternate names:	TCR V beta11, TCR Vb11
Catalog No.:	CL083P
Quantity:	0.2 mg
Concentration:	0.2 mg/ml
Host / Isotype:	Rat / IgG2b
Clone:	CTVB11
Format:	State: Liquid, purified. Buffer System: PBS and 0.09% NaN ₃ .
Applications:	Flow Cytometry. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This monoclonal 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. Species: Mouse. Other species not tested.
Storage:	Store the antibody undiluted at 2-8°C for 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. Immunogenetics 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 vivo. 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 with Lympholyte®-M (cell separation medium).

2. Wash 2 times.
3. Resuspend the cells to a concentration of 2×10^7 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 $\sim 1.0 \mu\text{g}^*$ of this Ab.
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 μ l of secondary antibody (FITC Goat anti-rat IgG (H+L)) at 1:500 dilution.
9. Incubate the tubes at 4°C for 30-60 minutes. (It is recommended that the tubes are protected from light since most fluorochromes are light sensitive).
10. Wash 2 times at 4°C in media B.
11. Resuspend the cell pellet in 50 μ l ice cold media B.
12. 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).