

## Monoclonal Antibody to T Cell Receptor (TCR) alpha/beta - FITC

<b>Alternate names:</b>	TCRA, TCRB, T-Cell Receptor alpha, T-Cell Receptor beta, T-Cell Receptor alpha beta
<b>Catalog No.:</b>	CL075FX
<b>Quantity:</b>	0.3 mg
<b>Concentration:</b>	0.1 mg/ml
<b>Host / Isotype:</b>	Hamster / IgG
<b>Clone:</b>	H57-597
<b>Immunogen:</b>	Affinity-purified DO-11.10 TCR Donor: Armenian Hamster Fusion Partner: Mouse myeloma variant P3X63 Ag.653
<b>Format:</b>	<b>State:</b> Liquid purified <b>Purification:</b> Protein G Chromatography <b>Buffer System:</b> PBS, 0.02% NaN <sub>3</sub> and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml. <b>Label:</b> FITC
<b>Applications:</b>	Flow Cytometry. Immunohistochemistry on frozen sections. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This anti-mouse ab T cell receptor monoclonal antibody reacts with the surface of all ab TCR bearing cells and does not react with receptors on gd TCR positive T cells. This monoclonal antibody when used in an immobilized form was able to activate all ab TCR bearing T cell hybridomas tested to produce IL-2. Use of this antibody in conjunction with an anti-CD3e monoclonal antibody allows for accurate measurements of the mutually exclusive sub-populations of ab TCR and gd TCR bearing T cells. <b>Species:</b> Mouse. Others not tested.
<b>Storage:</b>	Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing. This product is photosensitive and should be protected from light. Shelf life: one year from despatch.
<b>General References:</b>	1. Kubo, R.T. Born, W., Kappler, J.W., Marrack, P. and M. Pigeon. 1989. Characterization of a Monoclonal Antibody Which Detects All Murine ab T Cell Receptors. J. of Immunol. 142:2736-2742. 2. Goodman, T., Lefrancois, L. 1989. Intraepithelial Lymphocytes. J. of Exp. Med. 170:

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Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

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1569-1581.

3. Gross, J.A., E. Callas and J.P. Allison. 1992. Identification and Distribution of the Costimulatory Receptor CD28 in the Mouse. *J. of Immunol.* 149: 380-388.

4. Palathumpat, V. et al. 1992. Treatment of BCL1 Leukemia by Transplantation of Low Density Fractions of Allogeneic Bone Marrow and Spleen Cells. *J. of Immunol.* 148: 3319-3326.

5. Paliwal, V. et al. 1997. Recombinant Soluble ab TCR Receptors Protect T Cells from Immune Suppression. *J. of Immunol.* 159: 1718-1727.

6. Skarstein, K. et al. 1994. Oligoclonality of T cells in salivary glands of autoimmune MRL/lpr mice. *Immunology.* 81:497-501.

**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  $2 \times 10^7$  cells/ml in media A. Add 50  $\mu$ l of this suspension to each tube (each tube will then contain  $1 \times 10^6$  cells, representing 1 test).
4. To each tube, add 0.2 - 0.1  $\mu$ g\* of this Ab 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 fluorochromes are light sensitive.)
7. Wash 2 times at 4°C.
8. Resuspend the cell pellet in 50  $\mu$ l ice cold media B.
9. Transfer to suitable tubes for flow cytometric analysis containing 15  $\mu$ 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  $\mu$ l of 2M sodium azide in 100 mls).

B. Phosphate buffered saline (pH 7.2) + 0.5% Bovine serum albumin + sodium azide (100  $\mu$ l of 2M sodium azide in 100 mls).

**Results - Tissue Distribution by Flow Cytometry Analysis:**

Mouse Strain: BALB/c

Cell Concentration:  $1 \times 10^6$  cells per test

Antibody Concentration Used: 0.2  $\mu$ g/ $10^6$  cells

Isotypic Control: FITC Hamster IgG

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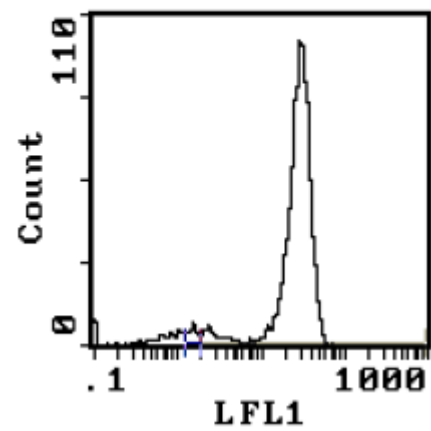
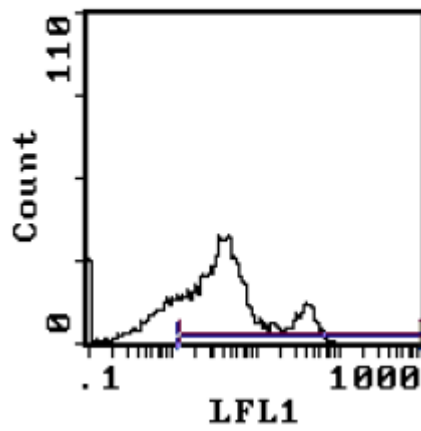
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Pictures:

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