

Product datasheet for **CL075B**

T Cell Receptor (TCR) alpha/beta Hamster Monoclonal Antibody [Clone ID: H57-597]

Product data:

Product Type:	Primary Antibodies
Clone Name:	H57-597
Applications:	FC
Recommended Dilution:	Flow cytometry. Immunoprecipitation. This clone has also been reported to work with frozen sections and Western Blotting.
Reactivity:	Mouse
Host:	Hamster
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	Affinity Purified D0-11.10 TCR Donor: Armenian Hamster Fusion Partner: Murine myeloma variant P3X63Ag.653
Specificity:	This mAb reacts with the surface of all ab TCR bearing cells and does not react with receptors on gd TCR positive T cells. When used in an immobilized form, this antibody 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 mAb allows for accurate measurements of the mutually exclusive sub-populations of ab TCR and gd TCR bearing T cells.
Formulation:	PBS,0.02% NaN ₃ and EIA grade BSA as a stabilizing protein to bring total protein concentration to 4-5 mg/ml. Label: Biotin State: Liquid purified Ig
Concentration:	lot specific
Purification:	Protein G Chromatography
Conjugation:	Biotin
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.
Stability:	Shelf life: one year from despatch.



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Synonyms: T-Cell Receptor alpha, T-Cell Receptor beta, T-Cell Receptor alpha beta

Note: Protocol: **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 1.0 μ 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.
7. Wash 2 times at 4°C.
8. Add 100 μ l of secondary antibody (Streptavidin-FITC) at a 1:500 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 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).

Results - Tissue Distribution by Flow Cytometry Analysis:

Mouse Strain: BALB/c

Cell Concentration: 1×10^6 cells per tests

Antibody Concentration Used: 1.0 μ g/ 10^6 cells

Isotypic Control: Biotin Hamster IgG

Cell Source Percentage of cells stained above control:

Thymus: 62.6% see **FIGURE 1**

Splenic T Cells: 76.2%

Strain Distribution by Flow Cytometry Analysis:

Cell Concentration: 1×10^6 cells per tests

Antibody Concentration Used: 1.0 μ g/ 10^6 cells

Strains Tested: BALB/c, C57BL/6, CBA/J, C3H/He, AKR

Positive: BALB/c, C57BL/6, CBA/J, C3H/He, AKR

Negative: none

Product images:

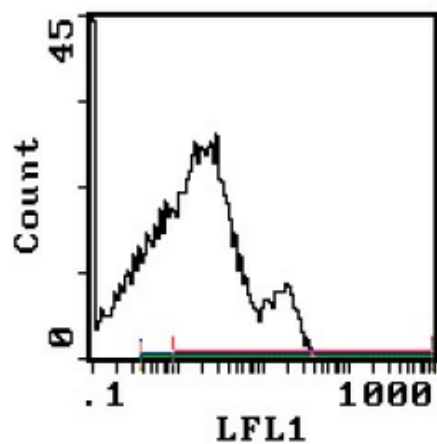


Figure 1