

## Product datasheet for **CL075FX**

### 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. Immunohistochemistry on frozen sections.
Reactivity:	Mouse
Host:	Hamster
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	Affinity-purified DO-11.10 TCR Donor: Armenian Hamster Fusion Partner: Mouse myeloma variant P3X63 Ag.653
Specificity:	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.
Formulation:	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. Label: FITC State: Liquid purified
Concentration:	lot specific
Purification:	Protein G Chromatography
Conjugation:	FITC
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. This product is photosensitive and should be protected from light.
Stability:	Shelf life: one year from despatch.



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**Synonyms:** TCRA, TCRB, 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  $2 \times 10^7$  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

**Cell Source: Percentage of Cells Stained Above Control**

Thymus: 76.9% see Figure A

Splenic T Cells: 90.3% see Figure B

**Strain Distribution by Flow Cytometry Analysis:**

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

Antibody Concentration Used: 1.0  $\mu$ g/ $10^6$  cells

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

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

Negative: none

## Product images:

