

Monoclonal Antibody to T Cell Receptor (TCR) gamma/delta - PE-Cy5

- Alternate names:** T-Cell Receptor delta, T-Cell Receptor gamma, T-Cell Receptor gamma delta, TCRD, TCRG
- Catalog No.:** SM093C
- Quantity:** 0.1 mg
- Concentration:** 0.2 mg/ml
- Host / Isotype:** Hamster / IgG
- Clone:** GL3
- Format:** **State:** Liquid purified Ig
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: PE-Cy5
Absorption / Emission: 488 nm/ 667 nm
- 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 surface on all gamma delta TCR bearing cells and does not react with receptors on alpha beta TCR positive cells. It is thought that this clone may be specific for a determinant present on Cδ 7. The gammadelta T cell receptors are present on murine CD4-CD8- thymocytes, peripheral T cells, intestinal CD8+ intraepithelial lymphocytes and Thy 1+ dendritic epidermal cells in the skin.
Use of this antibody in conjunction with an anti-CD3 monoclonal antibody (anti-CD3epsilon Monoclonal Antibody) allows for accurate measurements of the mutually exclusive sub-populations of gamma delta TCR and alpha beta TCR bearing T cells. This anti mouse gamma delta TCR monoclonal antibody has also been used successfully for the characterization of murine intraepithelial lymphocytes.
Species: Mouse.
Other species not tested.
- Add. Information:** PE-Cy5 conjugates require a 650 nm long pass filter in the FL3 channel. FL2-FL3 compensation will be in the range of 1%.
- Storage:** Store the antibody undiluted at 2-8°C.
DO NOT FREEZE!
This product is photosensitive and should be protected from light.
Shelf life: one year from despatch.
- General References:** 1. Brenner et al. 1986. Identification of a putative Second T Cell receptor. Nature (Lond.) 322:145.
2. Cron. R & et al. 1988. A functional subpopulation of peripheral murine T lymphocytes

For research and in vitro use only. Not for diagnostic or therapeutic work.

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which express a novel T Cell Structure. J. Immunol. 141:1074.

3. Nakawishii, N.K. et al. 1987. Ty protein is expressed on fetal thymocytes as a disulphide-linked heterodimer. Nature (Lond.) 325:720.

4. Sowder et al. 1988. A large subpopulation of avian T cells express a homologue of the mammalian Ty/ δ receptor. J. Exp. Med. 167:315.

5. Goodman, T & L. Lefrancois. 1988. Expression of the gamma delta TCR on intestinal CD8+ intraepithelial lymphocytes. Nature (Lond.) 333:855.

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

7. Goodman, T & L. Lefrancois. 1989. Intraepithelial Lymphocytes. J. Exp. Med. Vol. 170:1569-1581.

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 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 fluochromes are light sensitive.)
7. Wash 2 times at 4°C.
8. Resuspend the cell pellet in 50 μ l ice cold media B.
9. 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:

(Representative Histogram)

Mouse Strain: BALB/c

Cell Concentration: 1×10^6 cells per test

Antibody Concentration used: 10 μ l / 10^6

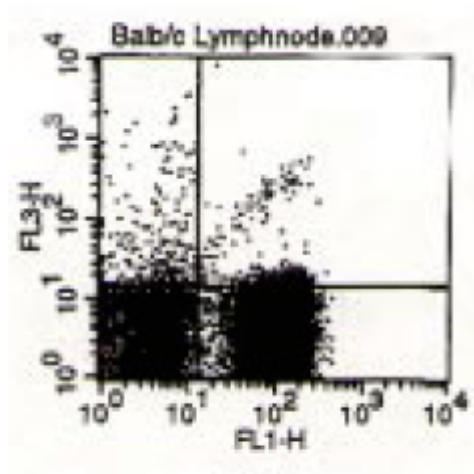
Isotypic Control: Hamster IgG Pe-Cy5

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Pictures:



Cell Source: Lymph Node

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