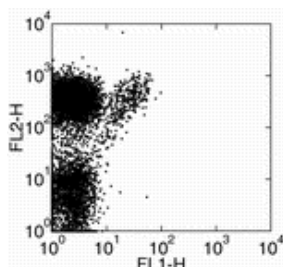


## Anti-Mouse gamma delta TCR Functional Grade Purified

**Catalog Number:** 16-5811

**Also Known As:** gd TCR, gdTCR, TCRgd

**RUO: For Research Use Only**



Staining of mouse lymph nodes with Anti-Mouse CD3e PE (cat. 12-0031) and Anti-Mouse gamma delta TCR FITC. Total viable cells were used for analysis.

### Product Information

**Contents:** Anti-Mouse gamma delta TCR Functional Grade Purified

**Formulation:** aqueous buffer, no sodium azide

**REF** **Catalog Number:** 16-5811

**Clone:** UC7-13D5

 **Temperature Limitation:** Store at 2-8°C.

**Concentration:** 1 mg/mL

**LOT** **Batch Code:** Refer to Vial

**Host/Isotype:** Armenian Hamster IgG

 **Use By:** Refer to Vial

**Handling Conditions:** Use in sterile environment.

**Endotoxin Level:** Less than 0.001 ng/ug antibody, as determined by the LAL assay.

### Description

The UC7-13D5 monoclonal antibody reacts with the mouse gamma delta TCR complex. The gamma delta TCR is expressed by a small subset of T cells in the thymus, peripheral lymphoid tissues, intestinal epithelium, and epidermis. The exact specificity, ligand and function of gamma delta TCR-bearing T cells are not yet fully understood; it is suggested that these cells recognize bacterial ligands and some tumor cells in the context of MHC class I-like gene products and play a role in regulation of the immune response and during bacterial infection.

### Applications Reported

UC7-13D5 has been reported for use as a phenotypic marker for  $\gamma\delta$  TCR-expressing T cells and has been reported for use in flow cytometric analysis, *in vitro* functional studies and *in vivo* depletion.

### Applications Tested

The UC7-13D5 antibody has been tested by flow cytometric analysis of mouse thymocyte and splenocyte suspensions and can be used at less than or equal to 0.5  $\mu$ g per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from  $10^5$  to  $10^8$  cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

Koenecke C, Chennupati V, Schmitz S, Malissen B, Förster R, Prinz I. In vivo application of mAb directed against the gammadelta TCR does not deplete but generates "invisible" gammadelta T cells. Eur J Immunol. 2009 Feb;39(2):372-9. (**UC7-13D5**, FA, PubMed)

Usami J, Hiromatsu K, Matsumoto Y, Maeda K, Inagaki H, Suzuki T, Yoshikai Y. A protective role of gamma delta T cells in primary infection with *Listeria monocytogenes* in autoimmune non-obese diabetic mice. Immunology. 1995 Oct;86(2):199-205. (**UC7-13D5**, FA)

Taguchi, T., W. K. Aicher, et al. Novel function for intestinal intraepithelial lymphocytes. Murine CD3+, gamma/delta TCR+ T cells produce IFN-gamma and IL-5. J Immunol 1991 147(11): 3736-44.

Kakkanaiah, V. N., M. Nagarkatti, et al. CD4-CD8- thymocytes from MRL-lpr/lpr mice exhibit abnormal proportions of alpha beta- and gamma delta-TCR+ cells and demonstrate defective responsiveness when activated through the TCR. Cell Immunol 1991 137(2): 269-82.

Bluestone, J. A., R. Q. Cron, et al. Repertoire development and ligand specificity of murine TCR gamma delta cells. Immunol Rev 1991 120: 5-33.

**Related Products**

11-4111 Anti-Armenian Hamster IgG FITC

11-4317 Streptavidin FITC

12-0031 Anti-Mouse CD3e PE (145-2C11)

12-4317 Streptavidin PE

13-4113 Anti-Armenian Hamster IgG Biotin (Polyclonal)

16-4888 Armenian Hamster IgG Isotype Control Functional Grade Purified (eBio299Arm)

17-4317 Streptavidin APC

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