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## **Product Information**

Contents: Affinity Purified anti-mouse γδTCR

Catalog Number: 14-5811 Sizes: 50 ug, 100 ug, 500 ug

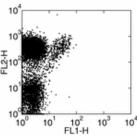
Formulation: Phosphate buffer pH 7.2,

150 mM NaCl, 0.09% NaN<sub>3</sub>

Storage Conditions: Store at 4°C. Avoid repeated freeze/thaw cycles.

Clone: UC7-13D5

Isotype: Armenian Hamster IgG



Two-color surface staining of mouse lymphnodes with anti-mouse gamma delta TCR (UC7-13D5) FITC and anti-mouse CD3e (145-2C11)
PE. Total viable cells were used for analysis.

Available Formats of This Product						
Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications		
11-5811	FITC anti-mouse gamma delta TCR (gd-TCR, gdTCR)	488	518	FC		
12-5811	DISCONTINUED - PE anti-mouse gamma delta TCR (gd-TCR, gdTCR)	488	575	FC		
13-5811	Biotin anti-mouse gamma delta TCR (gd-TCR, gdTCR)	N/A	N/A	FC		
14-5811	Affinity Purified anti-mouse gamma delta TCR (gd-TCR, gdTCR)	N/A	N/A	FC IP		
16-5811	Functional Grade* Purified anti-mouse gamma delta TCR (gd-TCR, gdTCR)	N/A	N/A	FC		

<sup>\*</sup>Functional Grade<sup> $\mathbb{M}$ </sup> (FG $\mathbb{M}$ ): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/ $\mu$ g. Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

### Description

The UC7-13D5 monoclonal antibody reacts with the mouse  $\gamma\delta$  TCR complex.  $\gamma\delta$  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.

# Usage

For research use only, not for diagnostic or therapeutic use. UC7-13D5 has been reported for use as a phenotypic marker for  $\gamma\delta$  TCR-expressing T cells in flow cytometric analysis, immunoprecipitation, in vitro functional studies and in vivo depletion. (For functional studies, use Functional Grade purified).

# **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  $0.5 \,\mu g/million$  cells. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

## Related Products

Cat. 11-4111 FITC Anti-Armenian Hamster	IaG	
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Cat. 13-4113 Biotin Anti-Armenian Hamster IgG (clone Polyclonal)
Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)

Cat. 12-4317 Streptavidin-PE (Phycoerythrin)

Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)

Cat. 14-4914 Affinity Purified Golden Syrian Hamster IgG Isotype Control (clone n/a)

#### References

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

Kakkanaiah, V. N., M. Nagarkatti, et al. (1991). "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 137(2): 269-82.

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