

# Mouse TCR γ/δ Antibody

Monoclonal Hamster IgG<sub>2</sub>, κ Clone # GL-3 Catalog Number: MAB7297

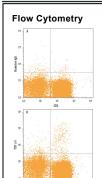
DESCRIPTION		
Species Reactivity	Mouse	
Specificity	Detects mouse TCR γ/δ.	
Source	Monoclonal Hamster IgG <sub>2</sub> , κ Clone # GL-3	
Purification	Protein A or G purified from hybridoma culture supernatant	
Immunogen	Mouse intraepithelial lymphocytes	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.	

#### **APPLICATIONS**

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website

	Recommended Concentration	Sample
Flow Cytometry	2.5 μg/10 <sup>6</sup> cells	See Below

### DATA



Detection of TCR y/δ delta in Mouse Lymph Node Cells by Flow Cytometry. Mouse lymph node cells were stained with Hamster Anti-Mouse TCR y/δ Monoclonal Antibody (Catalog # MAB7297) followed by Phycoerythrin-conjugated Anti-Hamster IgG Secondary Antibody (Catalog # F0120) and Rat Anti-Mouse CD3 APC-conjugated Monoclonal Antibody (Catalog # FAB4841A). Quadrant markers were set based on control antibody staining (Hamster InG)

PREPARATION AND STORAGE		
Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.	
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.	
	<ul> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> </ul>	

- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

## BACKGROUND

The  $\gamma\delta$  T-cell receptor (TCR) is a heteromer that includes type I transmembrane CD3 $\gamma$  and CD3 $\delta$  glycoprotein subunits of the Ig superfamily. Ty $\delta$  cells develop as a minor population in the thymus and migrate mainly to in skin and intestinal epithelial layers. Mouse and rat CD3 $\gamma$  and CD3 $\delta$  are synthesized as 182 and 173 amino acid (aa) precursors that result in 160 and 152 aa mature proteins with 94 and 84 aa extracellular domains (ECD), respectively. The germline ECD sequences of CD3 $\gamma$  and CD3 $\delta$  share 71% and 76% aa identity between mouse and rat, respectively, while both proteins and species share 57-62% aa identity with human CD3 $\gamma$  and CD3 $\delta$ . Mouse intraepithelial lymphocytes from the small intestine, which contain a major population of  $\gamma\delta$  T cells, were used as the immunogen for the GL-3/5E11 antibody(1).

### References:

1. Goodman, T. and L. Lefrancois (1989) J. Exp. Med. 170:2401569.

