# **Technical Data Sheet**

# FITC Hamster Anti-Mouse Vδ 4 TCR

#### **Product Information**

 Material Number:
 552143

 Size:
 0.1 mg

 Concentration:
 0.5 mg/ml

 Clone:
 GL2

**Immunogen:** G57BL/6 mouse intestinal intra-epithelial lymphocytes

 Isotype:
 Armenian Hamster IgG2, κ

 Reactivity:
 QC Testing: Mouse

**Storage Buffer:** Aqueous buffered solution containing ≤0.09% sodium azide.

## Description

The GL2 antibody reacts with V $\delta$  4 T-cell Receptor (TCR)-bearing T cells, which are the predominant  $\gamma\delta$  TCR-bearing cells in the adult intestinal epithelium ( $\gamma\delta$  IEL). The frequency of V $\delta$  4 TCR-bearing  $\gamma\delta$  IEL differs among inbred strains of mice and may be influenced by haplotypes of the MHC, *Tcrg*, and/or *Tcrd* gene complexes. There is evidence that these  $\gamma\delta$  IEL develop in the absence of thymic influence. T lymphocytes expressing V $\delta$  4 TCR have also been found in lactating mammary glands, the spleen, and the thymus.

## **Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed. Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

# **Application Notes**

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ſ	Flow cytometry	Routinely Tested			

#### Suggested Companion Products

Catalog Number	Name	Size	Clone
550056	FITC Hamster IgG2 κ Isotype Control	0.25 mg	B81-3

## **Product Notices**

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 3. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at <a href="http://www.bdbiosciences.com/pharmingen/hamster\_chart\_11x17.pdf">http://www.bdbiosciences.com/pharmingen/hamster\_chart\_11x17.pdf</a>.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

# References

Allison JP, Havran WL. The immunobiology of T cells with invariant gamma delta antigen receptors. *Annu Rev Immunol.* 1991; 9:679-705.(Biology) Goodman T, Lefrancois L. Intraepithelial lymphocytes. Anatomical site, not T cell receptor form, dictates phenotype and function. *J Exp Med.* 1989; 170(5):1569-1581.(Immunogen)

Lefrancois L, LeCorre R, Mayo J, Bluestone JA, Goodman T. Extrathymic selection of TCR gamma delta + T cells by class II major histocompatibility complex molecules. Cell. 1990; 63(2):333-340.(Biology)

Pereira P, Lafaille JJ, Gerber D, Tonegawa S. The T cell receptor repertoire of intestinal intraepithelial gammadelta T lymphocytes is influenced by genes linked to the major histocompatibility complex and to the T cell receptor loci. *Proc Natl Acad Sci U S A*. 1997; 94(11):5761-5766.(Biology)

Reardon C, Lefrancois L, Farr A, Kubo R, O'Brien R, Born W. Expression of gamma/delta T cell receptors on lymphocytes from the lactating mammary gland. *J Exp Med.* 1990; 172(4):1263-1266.(Biology)

Sperling AI, Cron RQ, Decker DC, Stern DA, Bluestone JA. Peripheral T cell receptor gamma delta variable gene repertoire maps to the T cell receptor loci and is influenced by positive selection. *J Immunol.* 1992; 149(10):3200-3207.(Biology)

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