## Technical Data Sheet

# Purified NA/LE Hamster Anti-Mouse yδ T-Cell Receptor

#### **Product Information**

**Material Number:** 553181 Size: 0.5 mg1.0 mg/mlConcentration: UC7-13D5 Clone: Immunogen: Not Reported

Isotype: Armenian Hamster IgG3, κ Reactivity: QC Testing: Mouse

Storage Buffer: No azide/low endotoxin: Aqueous buffered solution containing no preservative,

 $0.2\mu m$  sterile filtered. Endotoxin level is  $\leq 0.01$  EU/ $\mu g$  ( $\leq 0.001$  ng/ $\mu g$ ) of

protein as determined by the LAL assay.

#### Description

The UC7-13D5 antibody reacts with the γδ T-cell Receptor (TCR) complex on γδ TCR-expressing T lymphocytes and NK-T cells of all mouse strains tested. It does not react with the  $\alpha\beta$  TCR-bearing T cells. In the mouse, cell expressing the  $\gamma\delta$  TCR are found in the thymus, intestinal epithelium, epidermis, dermis, pulmonary epithelium, peritoneum, liver, and peripheral lymphoid organs. Plate-bound UC7-13D5 antibody activates  $\gamma\delta$  TCR-bearing T cells, and in vivo administration of the mAb depletes peripheral  $\gamma\delta$  TCR-bearing T cells.

## **Preparation and Storage**

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

#### **Application Notes**

## Application

FF ····	
Flow cytometry	Routinely Tested
Immunoprecipitation	Reported
Immunohistochemistry-formalin (antigen retrieval required)	Not Recommended

## Suggested Companion Products

Catalog Number	Name	Size	Clone	
553976	Purified NA/LE Hamster IgG3 λ1 Isotype Control	0.5 mg	A19-4	
554011	FITC Mouse Anti-Armenian and Syrian Hamster IgG Cocktail	0.5 mg	(none)	
553175	Purified Hamster Anti-Mouse γδ T-Cell Receptor	0.5 mg	GL3	

## **Product Notices**

- Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 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 http://www.bdbiosciences.com/documents/hamster\_chart\_11x17.pdf.
- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

#### References

Bluestone JA, Cron RQ, Barrett TA, et al. Repertoire development and ligand specificity of murine TCR gamma delta cells. Immunol Rev. 1991; 120:5-33. (Clone-specific: (Co)-stimulation, Immunoprecipitation)

Dieli F, Asherson GL, Sireci G, et al. gamma delta cells involved in contact sensitivity preferentially rearrange the Vgamma3 region and require interleukin-7. Eur J Immunol. 1997; 27(1):206-214. (Clone-specific: (Co)-stimulation, Depletion)

Hiromatsu K, Yoshikai Y, Matsuzaki G, et al. A protective role of gamma/delta T cells in primary infection with Listeria monocytogenes in mice. J Exp Med. 1992; 175(1):49-56. (Clone-specific: Depletion)

Kaufmann SH, Blum C, Yamamoto S. Crosstalk between alpha/beta T cells and gamma/delta T cells in vivo: activation of alpha/beta T-cell responses after gamma/delta T-cell modulation with the monoclonal antibody GL3. Proc Natl Acad Sci U S A. 1993; 90(20):9620-9624. (Biology)

King DP, Hyde DM, Jackson KA, et al. Cutting edge: protective response to pulmonary injury requires gamma delta T lymphocytes. J Immunol. 1999; 162(9):5033-5036. (Biology)

Kruisbeek AM, Shevach EM. Proliferative assays for T cell function. In: Coligan J, Kruisbeek AM, Margulies D, Shevach EM, Strober W, ed. Current Protocols in Immunology. New York: John Wiley and Sons; 1991:3.12.1-3.12.14. (Clone-specific: (Co)-stimulation)

Lefrancois L. Phenotypic complexity of intraepithelial lymphocytes of the small intestine. J Immunol. 1991; 147(6):1746-1751. (Biology)

MacDonald HR, Schreyer M, Howe RC, Bron C. Selective expression of CD8 alpha (Ly-2) subunit on activated thymic gamma/delta cells. Eur J Immunol. 1990; 20(4):927-930. (Biology)

Shinohara K, Ikarashi Y, Maruoka H, et al. Functional and phenotypical characteristics of hepatic NK-like T cells in NK1.1-positive and -negative mouse strains. Eur J Immunol. 1999; 29(6):1871-1878. (Biology)

### **BD Biosciences**

bdbiosciences.com

Asia Pacific Latin America/Caribbean Europe 877.232.8995 888.268.5430 32.53.720.550 0120.8555.90 65.6861.0633 0800.771.7157

For country-specific contact information, visit bdbiosciences.com/how\_to\_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2011 BD



Skeen MJ, Ziegler HK. Induction of murine peritoneal gamma/delta T cells and their role in resistance to bacterial infection. *J Exp Med.* 1993; 178(3):971-984. (Biology)

Tamaki K, Yasaka N, Chang CH, et al. Identification and characterization of novel dermal Thy-1 antigen-bearing dendritic cells in murine skin. *J Invest Dermatol.* 1996; 106(3):571-575. (Biology)

Tigelaar RE, Lewis JM, Bergstresser PR. TCR gamma/delta+ dendritic epidermal T cells as constituents of skin-associated lymphoid tissue. *J Invest Dermatol.* 1990; 94(6):58S-63S. (Biology)

van der Heyde HC, Elloso MM, Chang WL, Kaplan M, Manning DD, Weidanz WP. Gamma delta T cells function in cell-mediated immunity to acute blood-stage Plasmodium chabaudi adami malaria. *J Immunol.* 1995; 154(8):3985-3990. (Clone-specific: Depletion)

Vicari AP, Mocci S, Openshaw P, O'Garra A, Zlotnik A. Mouse gamma delta TCR+NK1.1+ thymocytes specifically produce interleukin-4, are major

histocompatibility complex class I independent, and are developmentally related to alpha beta TCR+NK1.1+ thymocytes. Eur J Immunol. 1996; 26(7):1424-1429. (Biology)

553181 Rev. 13 Page 2 of 2