## **Product Data Sheet**

#### Spark NIR™ 685 anti-mouse CD3

Catalog # / 1101310 / 100 µg

Size:  $1101305 / 25 \mu g$ 

Clone: 17A2

Isotype: Rat IgG2b, ĸ

γδTCR-positive T-T hybridoma D1 Immunogen:

Reactivity: Mouse

The antibody was purified by affinity Preparation:

chromatography and conjugated with

Spark NIR<sup>™</sup> 685 under optimal

conditions.

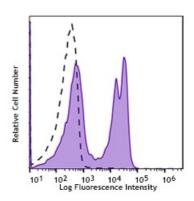
Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide

Workshop **Number:** 

750 under optimal conditions.

Concentration: 0.5 mg/mL



C57BL/6 mouse splenocytes were stained with CD3 (clone 17A2) Spark NIR™ 685 (filled histogram.) Open histogram represents unstained cells.

### **Applications:**

Applications: Flow Cytometry

Recommended **Usage:** 

Each lot of this antibody is quality

control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is  $\leq 0.5 \,\mu g$  per million cells in 100 µL volume. It is recommended that the reagent be titrated for

optimal performance for each application.

Spark NIR™ 685 has a maximum excitation of 665 nm and a maximum

emission of 685 nm.

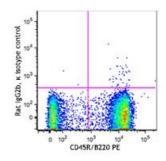
**Application** Notes:

ELISA or ELISPOT Capture<sup>2,3</sup>: The purified MQ1-17H12 antibody is

useful as the capture antibody in a sandwich ELISA or ELISPOT assay, when used in conjunction with the Biotin anti-human IL-2 antibody (Cat.

No. 517605) as the detecting antibody. The Ultra-LEAF™ purified antibody is suggested for ELISPOT

capture.



# Application References:

- 1. Andersson J, et al. 1994. Immunology 83:16. (IHC)
- 2. Abrams J, et al. 1992. Immunol. Rev. 127:5. (IP)
- 3. Abrams JS. 1995. Curr. Prot. Immunol. Unit 6.20.
- 4. Fernandez V, et al. 1994. Eur. J. Immunol. 24:1808. (IHC)
- 5. Skansen-Saphir U, et al. 1994. Eur. J. Immunol. 24:916. (IHC)
- 6. Andersson U, et al. Detection and Quantification of Gene Expression. New York: Springer-Verlag. (IHC)
- 7. Prussin C, et al. 1995. J. Immunol. Methods. 188:117.
- 8. Raqib R, et al. 2002. Infect. Immun. 70:3199. (IHC)
- 9. Dzhagalov I, et al. 2007. J. Immunol. 178:2113. PubMed
- 10. Colleton BA, et al. 2009. J Virol. 83:6288. PubMed
- 11. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97. (FC)
- 12. Rout N, et al. 2010. PLoS One 5:e9787. (FC)
- 13. Yeap SK, et al. 2013. BMC Complement Altern. Med. 13:145. (Neut)
- 14. Wu Z, et al. 2015. J Virol. 89:6435. PubMed
- 15. Maksaereekul S, et al. 2009. Vaccine. 28:3754 (FC) PubMed

#### **Description:**

CD3, also known as T3, is a member of the Ig superfamily and primarily expressed on T cells, NK-T cells, and at different levels on thymocytes during T cell differentiation. CD3 is composed of CD3 $\epsilon$ ,  $\delta$ ,  $\gamma$  and  $\zeta$  chains. It forms a TCR complex by associating with TCR  $\alpha/\beta$  or  $\gamma/\delta$  chains. CD3 plays a critical role in TCR signal transduction, T cell activation, and antigen recognition by binding the peptide/MHC antigen complex

# Antigen References:

- 1. Barclay A, et al. 1997. The Leukocyte Antigen FactsBook Academic Press.
- 2. Davis MM. 1990. Annu. Rev. Biochem. 59:475.
- 3. Weiss A, et al. 1994. Cell 76:263.