SONY

Product Data Sheet

Alexa Fluor® 488 anti-mouse CD3

Catalog # / Size: 1101060 / 25 µg
1101050 / 100 µg

Clone: 17A2

Isotype: Rat IgG2b, κ

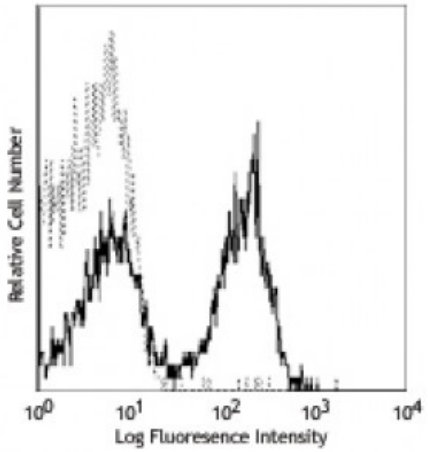
Immunogen: γδTCR-positive T-T hybridoma D1

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5mg/ml



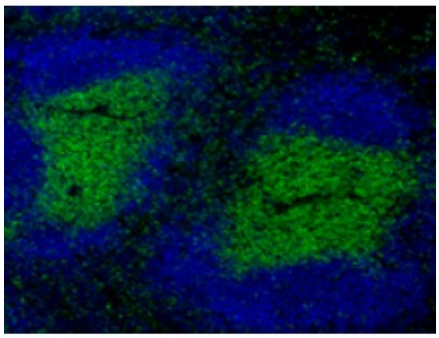
C57BL/6 mouse splenocytes stained with 17A2 Alexa Fluor® 488

Applications:

Applications: Immunofluorescence

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 ≤1.0 microg per million cells in 100 microL volume. For immunohistochemical staining on frozen tissue sections, the suggested use of this reagent is 5.0 - 10 microg per ml. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.



Application Notes: The 17A2 antibody recognizes ε/γ (but not ε/δ) of the CD3 complex. The 17A2 antibody can induce T cell activation and has been reported to deplete $CD3^+$ cells *in vivo*. Additional reported applications (for

Application References:

1. Miescher GC, *et al.* 1989. *Immunol. Lett.* 23:113. (IP, IHC, Activ, CMCD)
2. Mysliwietz J, *et al.* 1992. *Blood* 80:2661. (Deplete)
3. Wu L, *et al.* 1991. *J. Exp. Med.* 174:1617. (CMCD)
4. Zhang Y, *et al.* 2002. *J. Immunol.* 168:3088. (IHC)
5. Zan H, *et al.* 2005. *EMBO J.* 24:3757.
6. Morgado P, *et al.* 2011. *Infect Immun.* 79:4401. PubMed
7. Xiao J, *et al.* 2012. *Arterioscler Thromb Vasc Biol.* 32:386. PubMed
8. Wan W, *et al.* 2013. *Cardiovasc Res.* 97:580. PubMed
9. Langhauser F, *et al.* 2014. *Stroke.* 45:1799. PubMed
10. Datta S, *et al.* 2014. *J Leukoc Biol.* 95:853. PubMed
11. Hsieh CY, *et al.* 2014. *J Immunol.* 193:3693. PubMed

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12. Hanihara-Tatsuzaawa F, *et al.* 2014. *J Biol Chem.* 289:30925. PubMed
13. Wan W, *et al.* 2015. *Cardiovasc Res.* 106:478. 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 CD3ε, δ, γ and ζ chains. It forms a TCR complex by associating with TCR α/β or γ/δ 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.