

Pacific Blue™ anti-mouse CD3

Catalog # / Size: 100213 / 25 µg
100214 / 100 µg

Clone: 17A2

Isotype: Rat IgG2b, κ

Immunogen: γδTCR-positive T-T hybridoma D1

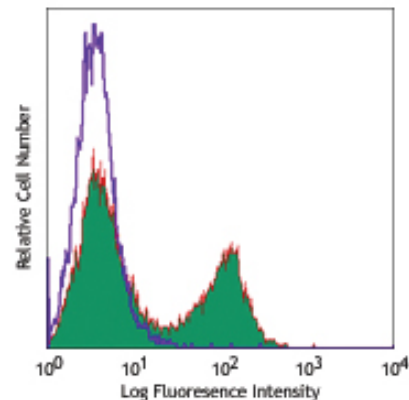
Reactivity: Mouse

Preparation: The CD3 antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

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

Concentration: 0.5 mg/ml

Storage: The CD3 antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



C57BL/6 mouse splenocytes stained with Pacific Blue™ 17A2

Applications:

Applications: FC

Recommended Usage: Each lot of this CD3 antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤ 0.5 µg per 10⁶ cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

** Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation¹, complement-mediated cytotoxicity^{1,3}, immunohistochemical staining^{1,4} of acetone-fixed frozen sections, *in vitro* stimulation of T cells¹ and depletion² of CD3⁺ cells *in vivo*. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm sterile-filtered) is recommended for functional assays (Cat. No. 100208).

- Application References:**
1. Miescher, G.C., *et al.*, 1989. *Immunol. Lett.* 23:113.
 2. Mysliwicz, J., *et al.*, 1992. *Blood* 80:2661.
 3. Wu, L., *et al.*, 1991. *J. Exp. Med.* 174:1617.
 4. Zhang, Y., *et al.*, 2002. *J. Immunol.* 168: 3088.
 5. Zan, H., *et al.*, 2005. *EMBO J.* 24: 3757.
 6. Achtman, AH., *et al.* 2009. *J. Leukoc Biol.* 85:409. PubMed
 7. Chiossone, L., *et al.* 2009. *Blood.* 113:5488. 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. The 17A2 antibody recognizes ε/γ (but not ε/δ) of CD3 complex. The 17A2 antibody can induce T cell activation and has been reported to deplete CD3⁺ cells *in vivo*.

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

Related Products:	Product	Clone	Application
	Cell Staining Buffer (FBS) Pacific Blue™ Rat IgG2b, κ Isotype Ctrl	RTK4530	FC, ICC, ICFC FC, ICFC



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