

APC Anti-Mouse CD3 (17A2) Antibody
Catalog # ATB10002**Specification****APC Anti-Mouse CD3 (17A2) Antibody - Product Information**

Application	FC
Isotype	Rat IgG2b, κ
Concentration	0.2 mg/mL
Reactivity	Mouse
Formulation	10 mM NaH ₂ PO ₄ , 150 mM NaCl, 0.09% NaN ₃ , 0.1% gelatin, pH7.2
Host	Rat

APC Anti-Mouse CD3 (17A2) Antibody - Additional Information

Gene ID	12502
Gene Name	Cd3g
Alternative Name(s)	
CD3 epsilon	

Format

APC

Application Notes

This antibody preparation has been quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

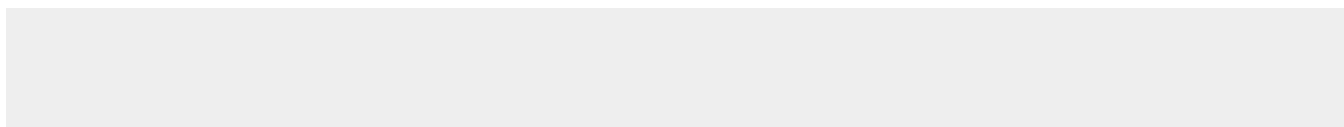
Storage Conditions

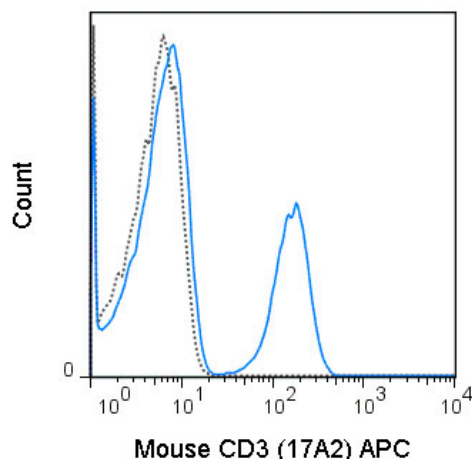
2-8°C protected from light

APC Anti-Mouse CD3 (17A2) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

APC Anti-Mouse CD3 (17A2) Antibody - Images



C57Bl/6 splenocytes were stained with 0.5 ug APC Anti-Mouse CD3 (ATB10002) (solid line) or 0.5 ug APC Rat IgG2b isotype control (dashed line).

APC Anti-Mouse CD3 (17A2) Antibody - Background

The 17A2 antibody reacts with the mouse CD3 complex, comprised of CD3 epsilon, CD3 gamma and CD3 delta. These integral membrane protein chains assemble with additional chains of the T cell receptor (TCR), as well as CD3 zeta chain, to form the T cell receptor - CD3 complex. Together with co-receptors CD4 or CD8, the complex serves to recognize antigens bound to MHC molecules on antigen-presenting cells. Such interactions promote T cell receptor signaling (T cell activation) and can result in a number of cellular responses including proliferation, differentiation, production of cytokines or activation-induced cell death. CD3 is differentially expressed during thymocyte-to-T cell development and on all mature T cells. The 17A2 antibody is a widely used phenotypic marker for mouse T cells. In addition, as the CD3e chain within the TCR complex contains intracellular signaling domains, binding of 17A2 antibody to CD3 can induce cell activation. A recent publication of the crystal structure of a murine CD3e-mitogenic antibody complex provides further insight into the action of commonly used agonist antibodies (Fernandes, R.A. et al. 2012. Journal of Biological Chemistry. 287: 13324-13335).