

APC Anti-Mouse CD4 (GK1.5) Antibody
Catalog # ATB10005

Specification

APC Anti-Mouse CD4 (GK1.5) Antibody - Product Information

Application	FC
Isotype	Rat IgG2b, kappa
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 CD4 (GK1.5) Antibody - Additional Information

Gene ID	12504
Gene Name	Cd4
Alternative Name(s)	
L3T4, T4	

Format
APC

Preparation

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

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

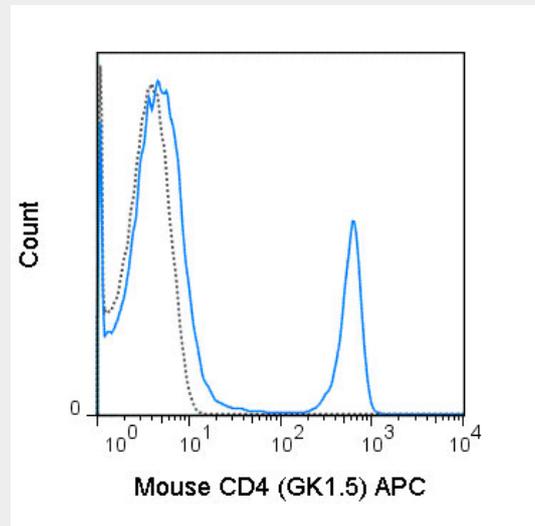
APC Anti-Mouse CD4 (GK1.5) Antibody - Protocols

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 CD4 (GK1.5) Antibody - Images



C57Bl/6 splenocytes were stained with 0.06 ug APC Anti-Mouse CD4 (ATB10005) (solid line) or 0.06 ug APC Rat IgG2b isotype control (dashed line).

APC Anti-Mouse CD4 (GK1.5) Antibody - Background

The GK1.5 antibody reacts with mouse CD4, a 55 kDa protein which acts as a co-receptor for the T cell receptor (TCR) in its interaction with MHC Class II molecules on antigen-presenting cells. The extracellular domain of CD4 binds to the beta-2 domain of MHC Class II, while its cytoplasmic tail provides a binding site for the tyrosine kinase *Lck*, facilitating the signaling cascade that initiates T cell activation. CD4 is typically expressed on thymocytes, certain mature T cell populations such as Th17 and T regulatory (Treg) cells, as well as on dendritic cells. The GK1.5 antibody is widely used as a phenotypic marker for CD4 expression. If used together, the GK1.5 antibody and an alternative antibody, Anti-Mouse CD4 clone RM4-5, will “compete” for binding, i.e. RM4-5 is able to block GK1.5 binding to cells. In contrast, the Anti-Mouse CD4 clone RM4-4 does not block binding of the GK1.5 antibody to cells (Arora S et al. 2006. *Infect. Immun.* 74: 4339-4348). The GK1.5 antibody is also reported to be cross-reactive with Syrian hamster CD4.