

In Vivo Ready[™] Anti-Mouse CD4 (GK1.5) Antibody Catalog # ATB10141

Specification

In Vivo Ready[™] Anti-Mouse CD4 (GK1.5) Antibody - Product Information

Application Isotype Concentration Reactivity Formulation Host IHC-F, FC, IP, FA Rat IgG2b, kappa 2 mg/mL Mouse 10 mM NaH2PO4, 150 mM NaCl, pH7.2 Rat

In Vivo Ready[™] Anti-Mouse CD4 (GK1.5) Antibody - Additional Information

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

Format In Vivo Ready™

Preparation

This monoclonal antibody preparation was purified from tissue culture supernatant via affinity chromatography. For In Vivo Ready[™] (IVR) products, each preparation is also evaluated for endotoxin levels using the LAL assay. It is recommended to store the product undiluted at 4°C. Do not freeze.

Application Notes

This purified format is guaranteed to be >90% pure as determined by SDS-PAGE analysis. Citations are provided as a convenience to you - please consult Materials and Methods sections for additional details about the use of any product in these publications.

Endotoxin Level Less than or equal to 0.01 EU/ug, as determined by the LaL assay

Storage Conditions 2-8°C

In Vivo Ready[™] Anti-Mouse CD4 (GK1.5) Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence



- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

In Vivo Ready[™] Anti-Mouse CD4 (GK1.5) Antibody - Images

In Vivo Ready[™] 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 is also reported to be cross-reactive with Syrian hamster CD4.