

# CD4 Monoclonal Antibody (GK1.5), APC, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Hamster, Mouse, Human
Host/Isotope	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), APC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	GK1.5
Conjugate	APC
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_469320

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.125 µg/test	131 Publications
Functional Assay (FN)	-	2 Publications
Immunohistochemistry (IHC)	-	1 Publication
In vitro Assay (IV)	-	2 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

## Product Specific Information

**Description:** The GK1.5 monoclonal antibody reacts with the mouse CD4 molecule, a 55 kDa cell surface receptor expressed by a majority of thymocytes, subpopulation of mature T cells and dendritic cells. CD4 binds to MHC class II on the surface of antigen presenting cells and plays an important role both in T cell development and in optimal functioning of mature T cells. In T cells, CD4 associates with protein tyrosine kinase p56lck through its cytoplasmic tail. Binding of GK1.5 is blocked by RM4-5.

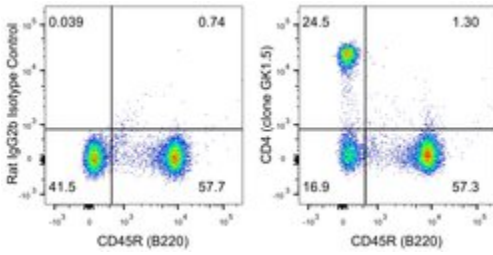
**Applications Reported:** The GK1.5 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** The GK1.5 antibody has been tested by flow cytometric analysis of mouse thymocytes and splenocytes. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

**Excitation:** 633-647 nm; **Emission:** 660 nm; **Laser:** Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

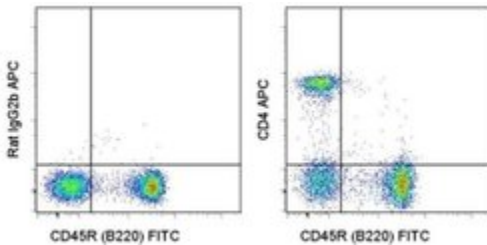
## Advanced Verification Data



### CD4 Antibody (17-0041-82)

Staining of mouse splenocytes. As expected based on known relative expression patterns, CD4 clone GK1.5 stains about 25% of total lymphocytes and does not stain CD45R (B220)+ B cells. Details: Balb/c splenocytes were surface stained with CD45R (B220, clone RA3-6B2) and Rat IgG2b Isotype Control or CD4 (clone GK1.5). Cells in the lymphocyte gate were used for analysis. Relative expression validation info.

## Product Images For CD4 Monoclonal Antibody (GK1.5), APC, eBioscience™



### CD4 Antibody (17-0041-82) in Flow

Staining of C57Bl/6 splenocytes with Anti-Human/Mouse CD45R (B220) FITC (Product # 11-0452-82) and 0.06 µg of Rat IgG2b K Isotype Control APC (Product # 17-4031-82) (left) or 0.06 µg of Anti-Mouse CD4 APC (right). Total viable cells were used for analysis.

## Flow Cytometry (131)

### Frontiers in immunology

#### Limited Foxp3<sup>+</sup> Regulatory T Cells Response During Acute *Trypanosoma cruzi* Infection Is Required to Allow the Emergence of Robust Parasite-Specific CD8<sup>+</sup> T Cell Immunity.

"17-0041 was used in Flow cytometry/Cell sorting to study the role of regulatory T cells during *Trypanosoma cruzi* infection."

Authors: Araujo Furlan CL, Tosello Boari J, Rodriguez C, Canale FP, Fiocca Vernengo F, Boccardo S, Beccaria CG, Adoue V, Joffre O, Gruppi A, Montes CL, Acosta Rodriguez EV

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2019

### Cell reports

#### Galectin-8 Favors the Presentation of Surface-Tethered Antigens by Stabilizing the B Cell Immune Synapse.

"17-0041 was used in Flow cytometry/Cell sorting to examine the mechanism by which Galectin-8 favours the presentation of surface-tethered antigens."

Authors: Obino D, Fetler L, Soza A, Malbec O, Saez JJ, Labarca M, Oyanadel C, Del Valle Batalla F, Goles N, Chikina A, Lankar D, Segovia-Miranda F, Garcia C, Léger T, Gonzalez A, Espéli M, Lennon-Duménil AM, Yuseff MI

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2018

[View more Flow references on thermofisher.com](#)

## Immunohistochemistry (1)

### Scientific reports

#### Heavy Chain-Hyaluronan/Pentraxin 3 from Amniotic Membrane Suppresses Inflammation and Scarring in Murine Lacrimal Gland and Conjunctiva of Chronic Graft-versus-Host Disease.

"17-0041 was used in Immunohistochemistry to help prove the concept that subcutaneous and subconjunctival injection of HC-HA/PTX3 is a novel approach to prevent dry eye disease caused by cGVHD."

Authors: Ogawa Y, He H, Mukai S, Imada T, Nakamura S, Su CW, Mahabole M, Tseng SC, Tsubota K

**Species**  
Mouse

**Dilution**  
Not Cited

**Year**  
2017

## In vitro Assay (2)

### Mucosal immunology

#### Primary Heligmosomoides polygyrus bakeri infection induces myeloid-derived suppressor cells that suppress CD4<sup>+</sup> Th2 responses and promote chronic infection.

"17-0041 was used in in vitro experiments to study the exact identity and role of the F4/80-CD11b+Gr+ cells accumulating around encysting larvae in intestinal tissue during primary Heligmosomoides polygyrus bakeri infection in mice."

Authors: Valanparambil RM, Tam M, Jardim A, Geary TG, Stevenson MM

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2017

## More applications with references on thermofisher.com

Misc (1) FN (2)

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