

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

## Product Details

Size	100 µg
Species Reactivity	Mouse
Published Species	Hamster, Mouse, Human
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), APC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	GK1.5
Conjugate	APC
Excitation/Emission Max	651/660 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_469320

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Flow Cytometry (Flow)	0.125 µg/test	172 Publications
Functional Assay (FN)	-	2 Publications
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.

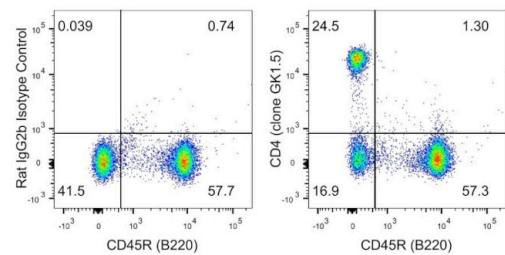
**Applications Reported:** The GK1.5 antibody has been reported for use in flow cytometric analysis.

**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.

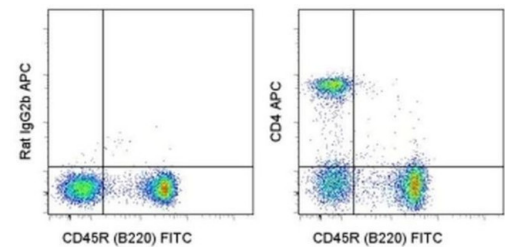
**Filtration:** 0.2 µm post-manufacturing filtered.

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



**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. {RE}



**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.

Immunohistochemistry (1)

Scientific reports	Year 2017
<b>Heavy Chain-Hyaluronan/Pentraxin 3 from Amniotic Membrane Suppresses Inflammation and Scarring in Murine Lacrimal Gland and Conjunctiva of Chronic Graft-versus-Host Disease.</b>	Species Mouse
"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	

Flow Cytometry (172)

Cell reports	Year 2022
<b>Diverging regulation of Bach2 protein and RNA expression determine cell fate in early B cell response.</b>	Species Mouse
"17-0041-82 was used in Flow cytometry/Cell sorting to reveal that differential dynamics of Bach2 protein and transcripts in activated B cells control their cell-fate outcomes and imprint the fates of their descendant effector cells."	
Authors: Hu Q,Xu T,Zhang M,Zhang H,Liu Y,Li HB,Chen C,Zheng J,Zhang Z,Li F,Shen N,Zhang W,Melnick A,Huang C	

Frontiers in genetics	Year 2022
<b>Next Generation Sequencing for Long Non-coding RNAs Profile for CD4<sup>+</sup> T Cells in the Mouse Model of Acute Asthma.</b>	Species Mouse
"17-0041-82 was used in Flow Cytometry to explore the lncRNAs profile in the CD4 <sup>+</sup> T cells from the mouse model of acute asthma."	
Authors: Wang Z,Ji N,Chen Z,Wu C,Sun Z,Yu W,Hu F,Huang M,Zhang M	

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

Functional Assay (2)

Investigative ophthalmology & visual science	Year 2008
<b>Suppression of alkali burn-induced corneal neovascularization by dendritic cell vaccination targeting VEGF receptor 2.</b>	
Authors: Mochimaru H,Usui T,Yaguchi T,Nagahama Y,Hasegawa G,Usui Y,Shimmura S,Tsubota K,Amano S, Kawakami Y,Ishida S	

More applications with references on thermofisher.com

- IV (2)
- Misc (1)

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