

# CD4 Monoclonal Antibody (GK1.5), Alexa Fluor™ 488, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Fish, Mouse, Human
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Alexa Fluor™ 488, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	GK1.5
Conjugate	Alexa Fluor™ 488
Excitation/Emission Max	499/520 nm
Form	Liquid
Concentration	0.5 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_469893

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	18 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	4 Publications
Immunocytochemistry (ICC/IF)	-	4 Publications
Flow Cytometry (Flow)	0.25 µg/test	183 Publications
Functional Assay (Functional)	-	3 Publications

## 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.

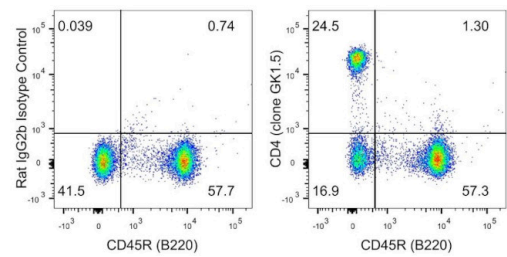
**Applications Reported:** This GK1.5 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This GK1.5 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used at less than or equal to 0.25 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: 488 nm; Emission: 519 nm; Laser: Blue Laser.

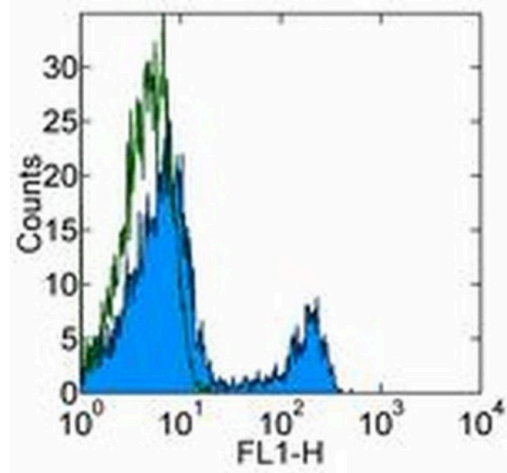
Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD4 Monoclonal Antibody (GK1.5), Alexa Fluor™ 488, eBioscience™



**CD4 Antibody (53-0041-82)**

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 (53-0041-82) in Flow**

Staining of C57BL/6 splenocytes with staining buffer (autofluorescence) (open histogram) or 0.125 µg of Anti-Mouse CD4 Alexa Fluor® 488 (filled histogram). Cells in the lymphocyte gate were used for analysis.

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Immunohistochemistry (18)

Current neuropharmacology	Year 2023
<b>Tumor-selective Blockade of CD47 Signaling with CD47 Antibody for Enhanced Anti-tumor Activity in Malignant Meningioma.</b>	
"Published figure using CD4 monoclonal antibody (Product # 53-0041-82) in Immunohistochemistry"	
Authors: Liu X,Zhang H,Wang C,Li Z,Zhu Q,Feng Y,Fan J,Qi S,Wu Z,Liu Y	

Cell reports	Year 2022
<b>Btla signaling in conventional and regulatory lymphocytes coordinately tempers humoral immunity in the intestinal mucosa.</b>	
"Published figure using CD4 monoclonal antibody (Product # 53-0041-82) in Immunohistochemistry"	
Authors: Stienne C,Virgen-Slane R,Elmén L,Veny M,Huang S,Nguyen J,Chappell E,Balmert MO,Shui JW,Hurchla MA,Kronenberg M,Peterson SN,Murphy KM,Ware CF,Šedý JR	

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Immunohistochemistry (PFA fixed) (1)

Molecular medicine (Cambridge, Mass.)	Year 2019
<b>Fimasartan reduces neointimal formation and inflammation after carotid arterial injury in apolipoprotein E knockout mice.</b>	
"Published figure using CD4 monoclonal antibody (Product # 53-0041-82) in Immunohistochemistry"	
Authors: Kim JH,Lim IR,Joo HJ,Park CY,Choi SC,Jeong HS,Hong SJ	

Immunohistochemistry (Frozen) (4)

International journal of molecular sciences	Year 2021
<b>Positive Effects of Oral Antibiotic Administration in Murine Chronic Graft-Versus-Host Disease.</b>	
"Published figure using CD4 monoclonal antibody (Product # 53-0041-82) in Immunohistochemistry"	
Authors: Sato S,Shimizu E,He J,Ogawa M,Asai K,Yazu H,Rusch R,Yamane M,Yang F,Fukuda S,Kawakami Y,Tsubota K,Ogawa Y	

[View more IHC \(F\) references on thermofisher.com](#)

More applications with references on thermofisher.com

- ICC/IF (4)
- Flow (183)
- Functional (3)

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