

# CD4 Monoclonal Antibody (GK1.5), Super Bright™ 436, eBioscience™

## Product Details

Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Super Bright™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	GK1.5
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2662397

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	5 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	0.125 µg/test	73 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 0.125 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.

Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

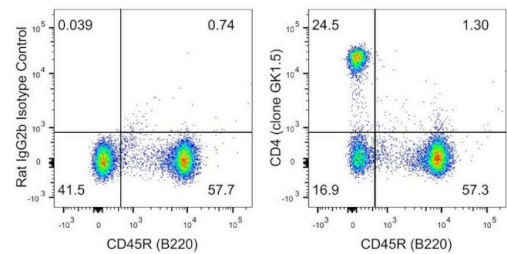
When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright

Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

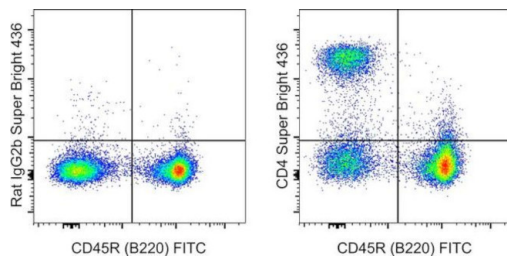
Excitation: 405 nm; Emission: 436 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD4 Monoclonal Antibody (GK1.5), Super Bright™ 436, eBioscience™



**CD4 Antibody (62-0041-82)**  
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 (62-0041-82) 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 Super Bright 436 (Product # 62-4031-82) (left) or 0.06 µg of Anti-Mouse CD4 Super Bright (right). Total viable cells were used for analysis.

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Immunohistochemistry (5)

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 # 62-0041-82) in Immunohistochemistry"	
Authors: Stienne C,Virgen-Slane R,Elmén L,Veny M,Huang S,Nguyen J,Chappell E,Balmer MO,Shui JW,Hurchla MA, Kronenberg M,Peterson SN,Murphy KM,Ware CF,Šedý JR	
Cancers	Year 2021
<b>Targeting Ovarian Carcinoma with TSP-1:CD47 Antagonist TAX2 Activates Anti-Tumor Immunity.</b>	
"Published figure using CD4 monoclonal antibody (Product # 62-0041-82) in Flow Cytometry"	
Authors: Jeanne A,Sarazin T,Charlé M,Moali C,Fichel C,Boulagnon-Rombi C,Callewaert M,Andry MC,Diesis E,Delolme F,Rioul D,Dedieu S	

View more IHC references on thermofisher.com

Immunohistochemistry (Frozen) (1)

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 # 62-0041-82) 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	

Immunocytochemistry (2)

Nature nanotechnology	Year 2021
<b>Cell-mimicking nanodecoys neutralize SARS-CoV-2 and mitigate lung injury in a non-human primate model of COVID-19.</b>	
"Published figure using CD4 monoclonal antibody (Product # 62-0041-82) in Immunocytochemistry"	
Authors: Li Z,Wang Z,Dinh PC,Zhu D,Popowski KD,Lutz H,Hu S,Lewis MG,Cook A,Andersen H,Greenhouse J,Pessaint L,Lobo LJ,Cheng K	

More applications with references on thermofisher.com

Flow (73)

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