

CD4 Monoclonal Antibody (GK1.5), Alexa Fluor™ 700, 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™ 700, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	GK1.5
Conjugate	Alexa Fluor™ 700
Excitation/Emission Max	696/719 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_493999

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	17 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	4 Publications
Flow Cytometry (Flow)	0.125 µg/test	175 Publications
Functional Assay (FN)	-	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 thymocyte and splenocyte suspensions. 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

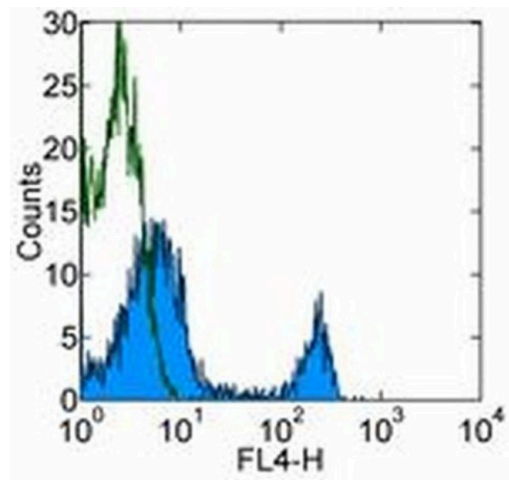
Alexa Fluor® 700 emits at 723 nm and can be excited with the red laser (633 nm). Most instruments will require a 685 LP

mirror and 710/20 filter. Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 633-647 nm; Emission: 723 nm; Laser: Red Laser.

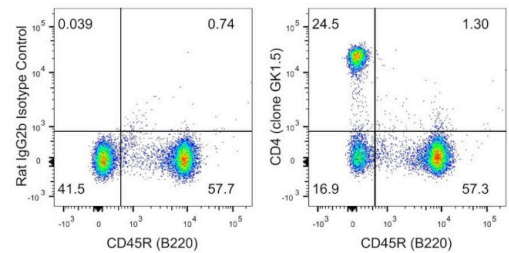
Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD4 Monoclonal Antibody (GK1.5), Alexa Fluor™ 700, eBioscience™



CD4 Antibody (56-0041-82) in Flow

Staining of C57BL/6 splenocytes with staining buffer (autofluorescence) (open histogram) or 0.06 µg of Anti-Mouse CD4 Alexa Fluor® 700 (filled histogram). Cells in the lymphocyte gate were used for analysis.



CD4 Antibody (56-0041-82)

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}

View more figures on thermofisher.com

Immunohistochemistry (17)

Cell reports	Year 2022
Btla signaling in conventional and regulatory lymphocytes coordinately tempers humoral immunity in the intestinal mucosa.	
"Published figure using CD4 monoclonal antibody (Product # 56-0041-82) 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	
Cancers	Year 2021
Targeting Ovarian Carcinoma with TSP-1:CD47 Antagonist TAX2 Activates Anti-Tumor Immunity.	
"Published figure using CD4 monoclonal antibody (Product # 56-0041-82) 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,Riolt D,Dedieu S	

View more IHC references on thermofisher.com

Immunohistochemistry (Frozen) (1)

International journal of molecular sciences	Year 2021
Positive Effects of Oral Antibiotic Administration in Murine Chronic Graft-Versus-Host Disease.	
"Published figure using CD4 monoclonal antibody (Product # 56-0041-82) 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 (4)

Nature nanotechnology	Year 2021
Cell-mimicking nanodecoys neutralize SARS-CoV-2 and mitigate lung injury in a non-human primate model of COVID-19.	
"Published figure using CD4 monoclonal antibody (Product # 56-0041-82) 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	

View more ICC/IF references on thermofisher.com

More applications with references on thermofisher.com

- Flow (175)
- FN (3)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (i) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (ii) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (iii) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (iv) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.