

CD4 Monoclonal Antibody (GK1.5), Biotin, 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), Biotin, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	GK1.5
Conjugate	Biotin
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_466325

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	20 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	2 Publications
Immunocytochemistry (ICC/IF)	-	4 Publications
Flow Cytometry (Flow)	0.25 µg/test	179 Publications
Functional Assay (FN)	-	3 Publications
Miscellaneous PubMed (Misc)	-	5 Publications

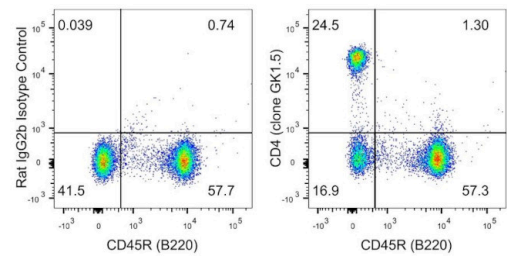
Product Specific Information

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

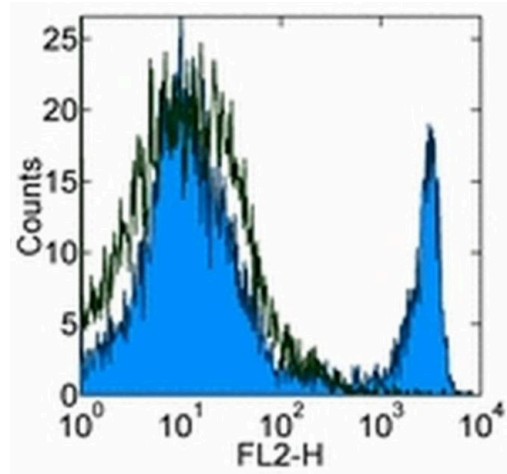
Applications Tested: The GK1.5 antibody has been tested by flow cytometric analysis of mouse thymocytes and splenocytes. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Filtration: 0.2 µm post-manufacturing filtered.



CD4 Antibody (13-0041-82)

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 (13-0041-82) in Flow

Staining of C57BL/6 splenocytes with 0.125 µg of Rat IgG2b kappa Isotype Control Biotin (Product # 13-4031-82) (open histogram) or 0.125 µg of Anti-Mouse CD4 Biotin (filled histogram) followed by Streptavidin PE (Product # 12-4317-87). Total viable cells were used for analysis.

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Immunohistochemistry (20)

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 # 13-0041-82) 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
Targeting Ovarian Carcinoma with TSP-1:CD47 Antagonist TAX2 Activates Anti-Tumor Immunity.	
"Published figure using CD4 monoclonal antibody (Product # 13-0041-82) 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,Riout D,Dedieu S	

View more IHC references on thermofisher.com

Immunohistochemistry (Frozen) (2)

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 # 13-0041-82) in Immunocytochemistry"	
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	
Blood	Year 2006
Characterization of Siglec-H as a novel endocytic receptor expressed on murine plasmacytoid dendritic cell precursors.	Species Mouse
"13-0041 was used in Immunofluorescence to analyse the cellular expression pattern and functional properties of Siglec-H."	
Authors: Zhang J,Raper A,Sugita N,Hingorani R,Salio M,Palmowski MJ,Cerundolo V,Crocker PR	

More applications with references on thermofisher.com

- ICC/IF (4)
- Flow (179)
- FN (3)
- Misc (5)

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