

CD4 Monoclonal Antibody (GK1.5), Biotin, Functional Grade, eBioscience™

Product Details	
Size	500 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 , Functional Grade
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_469748

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	18 Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	1 Publication
Immunocytochemistry (ICC/IF)	-	4 Publications
Flow Cytometry (Flow)	0.125 µg/test	148 Publications
Immunoprecipitation (IP)	Assay-Dependent	-
Functional Assay (FN)	Assay-Dependent	2 Publications
Control (Ctrl)	Assay-Dependent	-

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, immunoprecipitation, and immunohistochemical staining of frozen tissue sections. It has also been reported in isolation and depletion of CD4+ cells, and for blocking of CD4-ligand binding and T cell activation that occurs through CD4.

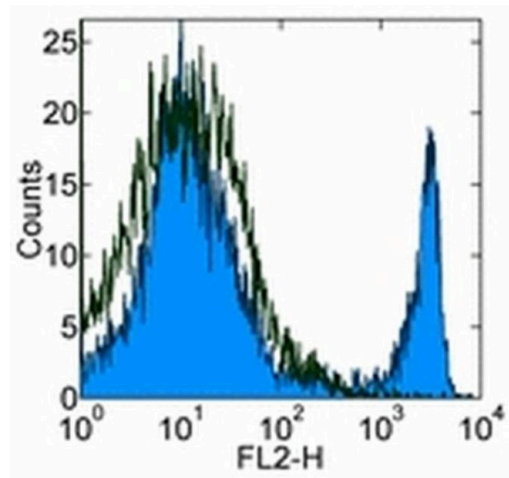
Applications Tested: This GK1.5 antibody has been tested by flow cytometric analysis of mouse thymocytes and splenocytes. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It

is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

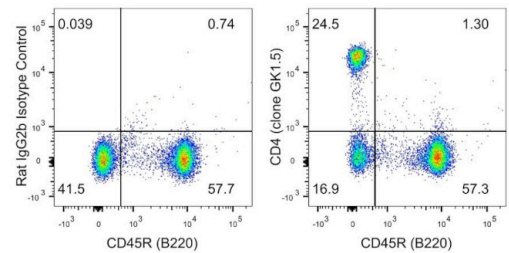
Endotoxin: Less than 0.05 ng/µg antibody as determined by the LAL assay.

Storage and handling: Use in a sterile environment.

Product Images For CD4 Monoclonal Antibody (GK1.5), Biotin, Functional Grade, eBioscience™



CD4 Antibody (36-0041-85) in Flow
Staining of C57BL/6 splenocytes with 0.125 µg of Rat IgG2b kappa Isotype Control Functional Grade Biotin (Product # 16-4031-81) (open histogram) or 0.125 µg of Anti-Mouse CD4 Functional Grade Biotin (filled histogram) followed by Streptavidin PE (Product # 12-4317-87). Total viable cells were used for analysis.



CD4 Antibody (36-0041-85)
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}

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Immunohistochemistry (18)

<p>Nature communications</p> <p>Increased levels of endogenous retroviruses trigger fibroinflammation and play a role in kidney disease development.</p> <p>"36-0041-85 was used in Immunohistochemistry-immunofluorescence to indicate an important role of epigenetic derepression-induced ERV activation triggering renal fibroinflammation."</p> <p>Authors: Dhillon P,Mulholland KA,Hu H,Park J,Sheng X,Abedini A,Liu H,Vassalotti A,Wu J,Susztak K</p>	<p>Year 2023</p> <p>Species Mouse</p> <p>Dilution 1:100</p>
<p>Cell reports</p> <p>Btla signaling in conventional and regulatory lymphocytes coordinately tempers humoral immunity in the intestinal mucosa.</p> <p>"Published figure using CD4 monoclonal antibody (Product # 36-0041-85) in Immunohistochemistry"</p> <p>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</p>	<p>Year 2022</p>

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Immunohistochemistry (Frozen) (1)

<p>International journal of molecular sciences</p> <p>Positive Effects of Oral Antibiotic Administration in Murine Chronic Graft-Versus-Host Disease.</p> <p>"Published figure using CD4 monoclonal antibody (Product # 36-0041-85) in Immunohistochemistry"</p> <p>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</p>	<p>Year 2021</p>
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Immunocytochemistry (4)

<p>Nature nanotechnology</p> <p>Cell-mimicking nanodecoys neutralize SARS-CoV-2 and mitigate lung injury in a non-human primate model of COVID-19.</p> <p>"Published figure using CD4 monoclonal antibody (Product # 36-0041-85) in Immunocytochemistry"</p> <p>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</p>	<p>Year 2021</p>
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More applications with references on thermofisher.com

- Flow (148)
- FN (2)

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