

CD4 Monoclonal Antibody (GK1.5), PE, 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), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	GK1.5
Conjugate	PE
Excitation/Emission Max	565/576 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_465506

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	3 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	2 Publications
Immunocytochemistry (ICC/IF)	-	3 Publications
Flow Cytometry (Flow)	0.125 µg/test	280 Publications
Functional Assay (FN)	-	3 Publications
Miscellaneous PubMed (Misc)	-	2 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.

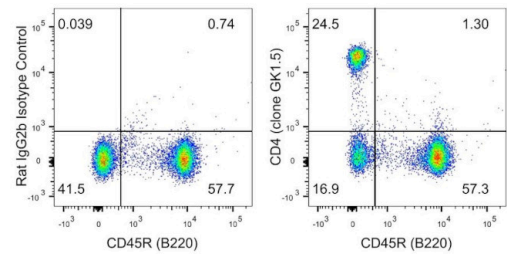
Applications Reported: The GK1.5 antibody has been reported for use in flow cytometric analysis.

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 0.125 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.

Excitation: 488-561 nm; Emission: 578 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

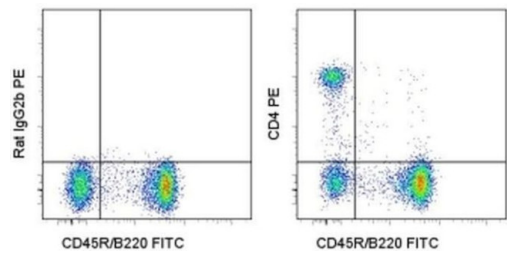
Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD4 Monoclonal Antibody (GK1.5), PE, eBioscience™



CD4 Antibody (12-0041-82)

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 (12-0041-82) 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 PE (Product # 12-4031-82) (left) or 0.06 µg of Anti-Mouse CD4 PE (right). Total viable cells were used for analysis.

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Western Blot (1)

<p>Molecular and cellular biology</p> <p>Increased p300 expression inhibits glucocorticoid receptor-T-cell receptor antagonism but does not affect thymocyte positive selection.</p> <p>"12-0041 was used in Western Blotting to determine the effects of increased p300 expression on GR-TCR crosstalk between thymocytes."</p> <p>Authors: Yu CT,Feng MH,Shih HM,Lai MZ</p>	<p>Year 2002</p> <p>Species Mouse</p>
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Immunohistochemistry (3)

<p>Cancers</p> <p>Targeting Ovarian Carcinoma with TSP-1:CD47 Antagonist TAX2 Activates Anti-Tumor Immunity.</p> <p>"Published figure using CD4 monoclonal antibody (Product # 12-0041-82) in Flow Cytometry"</p> <p>Authors: Jeanne A,Sarazin T,Charlé M,Moali C,Fichel C,Boulagnon-Rombi C,Callewaert M,Andry MC,Diesis E,Delolme F,Rioult D,Dedieu S</p>	<p>Year 2021</p>
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<p>Nature communications</p> <p>Differential cell-intrinsic regulations of germinal center B and T cells by miR-146a and miR-146b.</p> <p>"12-0041 was used in Immunohistochemistry to reveal differential cell-intrinsic regulations of GC B and Tfh cells by miR-146a and miR-146b."</p> <p>Authors: Cho S, Lee HM, Yu IS, Choi YS, Huang HY, Hashemifar SS, Lin LL, Chen MC, Afanasiev ND, Khan AA, Lin SW, Rudensky AY, Crotty S, Lu LF</p>	<p>Year 2018</p> <p>Species Mouse</p> <p>Dilution 1:100</p>
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Immunohistochemistry (Frozen) (2)

<p>The American journal of pathology</p> <p>Innate IL-17A-producing leukocytes promote acute kidney injury via inflammasome and Toll-like receptor activation.</p> <p>"12-0041 was used in Immunohistochemistry on frozen tissues to investigate the pathogenic role of IL-17A in cisplatin-induced acute kidney injury."</p> <p>Authors: Chan AJ,Alikhan MA,Odobasic D,Gan PY,Khouri MB,Steinmetz OM,Mansell AS,Kitching AR,Holdsworth SR, Summers SA</p>	<p>Year 2014</p> <p>Species Mouse</p>
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More applications with references on thermofisher.cn

- ICC/IF (3)
- Flow (280)
- FN (3)
- Misc (2)

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