

CD4 Monoclonal Antibody (GK1.5), APC, eBioscience™

| Product Details | |
|-----------------------------|---|
| Size | 100 µg |
| Species Reactivity | Mouse |
| Published Species | Hamster, Mouse, Human |
| Host/Isotype | Rat / IgG2b, kappa |
| Recommended Isotype Control | Rat IgG2b kappa Isotype Control (eB149/10H5), APC, eBioscience™ |
| Class | Monoclonal |
| Type | Antibody |
| Clone | GK1.5 |
| Conjugate | APC |
| Form | Liquid |
| Concentration | 0.2 mg/mL |
| Purification | Affinity chromatography |
| Storage buffer | PBS, pH 7.2, with 0.1% gelatin |
| Contains | 0.09% sodium azide |
| Storage conditions | 4° C, store in dark, DO NOT FREEZE! |
| RRID | AB_469320 |

| Applications | Tested Dilution | Publications |
|-----------------------------|-----------------|------------------|
| Immunohistochemistry (IHC) | - | 1 Publication |
| Flow Cytometry (Flow) | 0.125 µg/test | 159 Publications |
| Functional Assay (FN) | - | 2 Publications |
| In vitro Assay (IV) | - | 2 Publications |
| Miscellaneous PubMed (Misc) | - | 1 Publication |

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.

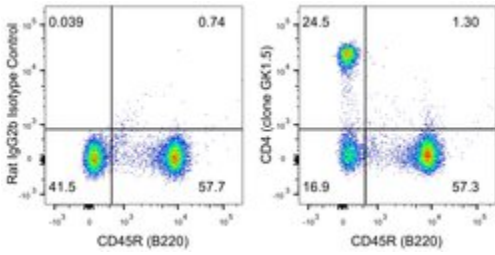
Applications Reported: The GK1.5 antibody has been reported for use in flow cytometric analysis.

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: 633-647 nm; **Emission:** 660 nm; **Laser:** Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

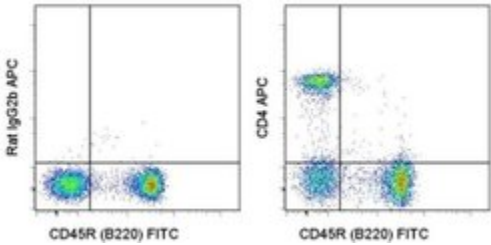
Advanced Verification Data



CD4 Antibody (17-0041-82)

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. Relative expression validation info.

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



CD4 Antibody (17-0041-82) 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 APC (Product # 17-4031-82) (left) or 0.06 µg of Anti-Mouse CD4 APC (right). Total viable cells were used for analysis.

Immunohistochemistry (1)

Scientific reports

Heavy Chain-Hyaluronan/Pentraxin 3 from Amniotic Membrane Suppresses Inflammation and Scarring in Murine Lacrimal Gland and Conjunctiva of Chronic Graft-versus-Host Disease.

"17-0041 was used in Immunohistochemistry to help prove the concept that subcutaneous and subconjunctival injection of HC-HA/PTX3 is a novel approach to prevent dry eye disease caused by cGVHD."

Authors: Ogawa Y, He H, Mukai S, Imada T, Nakamura S, Su CW, Mahabole M, Tseng SC, Tsubota K

Species
Mouse

Dilution
Not Cited

Year
2017

Flow Cytometry (159)

Translational neurodegeneration

Blocking meningeal lymphatic drainage aggravates Parkinson's disease-like pathology in mice overexpressing mutated α -synuclein.

"17-0041 was used in Flow cytometry/Cell sorting to suggest that brain lymphatic clearance dysfunction may be an aggravating factor in PD pathology."

Authors: Zou W, Pu T, Feng W, Lu M, Zheng Y, Du R, Xiao M, Hu G

Species
Mouse

Dilution
1:400

Year
2022

Frontiers in genetics

Next Generation Sequencing for Long Non-coding RNAs Profile for CD4⁺ T Cells in the Mouse Model of Acute Asthma.

"17-0041-82 was used in Flow Cytometry to explore the lncRNAs profile in the CD4⁺T cells from the mouse model of acute asthma."

Authors: Wang Z, Ji N, Chen Z, Wu C, Sun Z, Yu W, Hu F, Huang M, Zhang M

Species
Mouse

Dilution
Not Cited

Year
2022

[View more Flow references on thermofisher.com](#)

Functional Assay (2)

Investigative ophthalmology & visual science

Suppression of alkali burn-induced corneal neovascularization by dendritic cell vaccination targeting VEGF receptor 2.

Authors: Mochimaru H, Usui T, Yaguchi T, Nagahama Y, Hasegawa G, Usui Y, Shimmura S, Tsubota K, Amano S, Kawakami Y, Ishida S

Species
Not Applicable

Dilution
Not Cited

Year
2008

More applications with references on thermofisher.com

IV (2) Misc (1)

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.