

# CD4 Monoclonal Antibody (GK1.5), FITC, eBioscience™

| Product Details             |  |
|-----------------------------|--|
| Size                        | 100 µg   |
| Species Reactivity          | Mouse  |
| Published Species           | Rat, Fish, Mouse, Human  |
| Host/Isotype                | Rat / IgG2b, kappa   |
| Recommended Isotype Control | Rat IgG2b kappa Isotype Control (eB149/10H5), FITC, eBioscience™ |
| Class                       | Monoclonal   |
| Type                        | Antibody   |
| Clone                       | GK1.5  |
| Conjugate                   | FITC   |
| Excitation/Emission Max     | 498/517 nm   |
| 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_464892  |

| Applications                              | Tested Dilution | Publications     |
|---|-----------------|------------------|
| Immunohistochemistry (IHC)                | -               | 20 Publications  |
| Immunohistochemistry (Paraffin) (IHC (P)) | -               | 1 Publication    |
| Immunohistochemistry (Frozen) (IHC (F))   | -               | 2 Publications   |
| Immunocytochemistry (ICC/IF)              | -               | 7 Publications   |
| Flow Cytometry (Flow)                     | 0.25 µg/test    | 368 Publications |
| Functional Assay (FN)                     | -               | 2 Publications   |
| Miscellaneous PubMed (Misc)               | -               | 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.

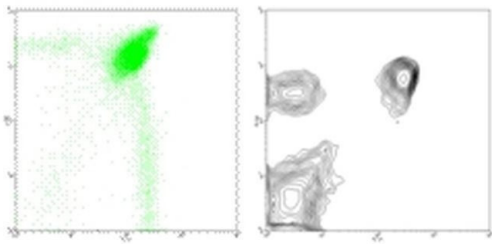
**Applications Reported:** The GK1.5 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This GK1.5 antibody has been tested by flow cytometric analysis of mouse 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 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

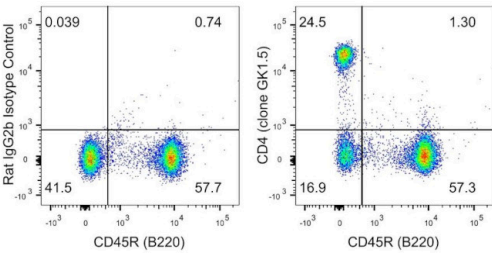
Excitation: 488 nm; Emission: 520 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

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



**CD4 Antibody (11-0041-82) in Flow**  
Staining of mouse thymocytes with Anti-Mouse CD8a PE (Product # 12-0081-82) (left) or mouse splenocytes with Anti-Mouse CD3e PE (Product # 12-0031-82) (right) and Anti-Mouse CD4 FITC. Total viable cells were used for analysis.



**CD4 Antibody (11-0041-82)**  
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}

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Immunohistochemistry (20)

|  |              |
|--|--------------|
| Cell reports   | Year<br>2022 |
| <b>Btla signaling in conventional and regulatory lymphocytes coordinately tempers humoral immunity in the intestinal mucosa.</b>                             |              |
| "Published figure using CD4 monoclonal antibody (Product # 11-0041-82) 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<br>2021 |
| <b>Targeting Ovarian Carcinoma with TSP-1:CD47 Antagonist TAX2 Activates Anti-Tumor Immunity.</b>  |              |
| "Published figure using CD4 monoclonal antibody (Product # 11-0041-82) 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,Rioul D,Dedieu S                            |              |

View more IHC references on thermofisher.com

Immunohistochemistry (Paraffin) (1)

|   |                     |
|---|---------------------|
| World journal of gastroenterology   | Year<br>2018        |
| <b>Impact of hyperglycemia on autoimmune pancreatitis and regulatory T-cells.</b>         | Species<br>Mouse    |
| "Published figure using CD4 monoclonal antibody (Product # 11-0041-82) in Flow Cytometry" | Dilution<br>1:1,200 |
| Authors: Müller-Graff FT,Fitzner B,Jaster R,Vollmar B,Zechner D                           |                     |

Immunohistochemistry (Frozen) (2)

|  |              |
|--|--------------|
| International journal of molecular sciences  | Year<br>2021 |
| <b>Positive Effects of Oral Antibiotic Administration in Murine Chronic Graft-Versus-Host Disease.</b>             |              |
| "Published figure using CD4 monoclonal antibody (Product # 11-0041-82) 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 |              |

More applications with references on thermofisher.com

- ICC/IF (7)
- Flow (368)
- FN (2)
- Misc (3)

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