

CD4 Monoclonal Antibody (RM4-5), Alexa Fluor™ 700, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Alexa Fluor™ 700, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RM4-5
Conjugate	Alexa Fluor™ 700
Excitation/Emission Max	696/719 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_494002

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	10 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	4 Publications
Flow Cytometry (Flow)	0.125 µg/test	136 Publications

Product Specific Information

Description: The RM4-5 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 RM4-5 is blocked by GK1.5.

Applications Reported: This RM4-5 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This RM4-5 antibody has been tested by flow cytometric analysis of mouse thymocyte and splenocyte suspensions. 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.

Alexa Fluor® 700 emits at 723 nm and can be excited with the red laser (633 nm). Most instruments will require a 685 LP

mirror and 710/20 filter. Please make sure that your instrument is capable of detecting this fluorochrome.

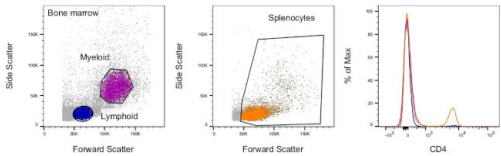
Excitation: 633-647 nm; Emission: 723 nm; Laser: Red Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD4 Monoclonal Antibody (RM4-5), Alexa Fluor™ 700, eBioscience™

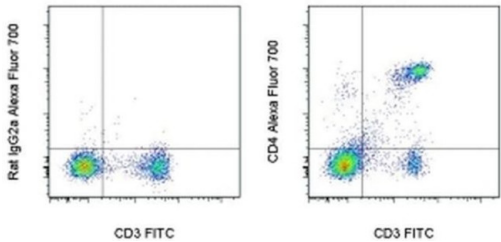
CD4 Antibody (56-0042-80)

Staining of mouse splenocytes and bone marrow cells. Right: As expected based on known relative expression patterns, CD4 clone RM4-5 stains a subset of splenocytes and does not stain any bone marrow cells. Details: Balb/c bone marrow cells (left) and splenocytes (middle) were surface stained with CD4 (clone RM4-5) followed by staining with 7-AAD. Viable bone marrow cells in the lymphoid (blue histogram) and myeloid (purple histogram) gates and viable splenocytes (orange histogram) were used for analysis. {RE}



CD4 Antibody (56-0042-80) in Flow

Staining of mouse splenocytes with Anti-Mouse CD3 FITC (Product # 11-0032-82) and 0.06 µg of Rat IgG2a K Isotype Control Alexa Fluor® 700 (Product # 56-4321-80) (left) or 0.06 µg of Anti-Mouse CD4 Alexa Fluor® 700 (right). Cells in the lymphocyte gate were used for analysis.



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Immunohistochemistry (10)

<p>Cells</p> <p>Complete Freund's Adjuvant Induces a Fibroblast-like Synoviocytes (FLS) Metabolic and Migratory Phenotype in Resident Fibroblasts of the Inoculated Footpad at the Earliest Stage of Adjuvant-Induced Arthritis.</p> <p>"Published figure using CD4 monoclonal antibody (Product # 56-0042-82) in Immunohistochemistry"</p> <p>Authors: González-Chávez SA,Chaparro-Barrera E,Alvarado-Jáquez MF,Cuevas-Martínez R,Ochoa-Albíztegui RE,Pacheco-Tena C</p>	<p>Year 2023</p>
<p>Frontiers in immunology</p> <p>Black raspberry extract inhibits regulatory T-cell activity in a murine model of head and neck squamous cell carcinoma chemoprevention.</p> <p>"Published figure using CD4 monoclonal antibody (Product # 56-0042-82) in Immunohistochemistry"</p> <p>Authors: Ryan NM,Lamenza FF,Upadhaya P,Pracha H,Springer A,Swingler M,Siddiqui A,Oghumu S</p>	<p>Year 2022</p>

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Immunohistochemistry (PFA fixed) (1)

<p>Immunity</p> <p>T Cell Recruitment to the Intestinal Stem Cell Compartment Drives Immune-Mediated Intestinal Damage after Allogeneic Transplantation.</p> <p>"Published figure using CD4 monoclonal antibody (Product # 56-0042-82) in Immunocytochemistry"</p> <p>Authors: Fu YY,Egorova A,Sobieski C,Kuttiyara J,Calafiore M,Takashima S,Clevers H,Hanash AM</p>	<p>Year 2019</p>
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Immunohistochemistry (Frozen) (1)

<p>Biology</p> <p>Increased Levels of IL-16 in the Central Nervous System during Neuroinflammation Are Associated with Infiltrating Immune Cells and Resident Glial Cells.</p> <p>"Published figure using CD4 monoclonal antibody (Product # 56-0042-82) in Immunohistochemistry (Frozen)"</p> <p>Authors: Hridi SU,Barbour M,Wilson C,Franssen AJ,Harte T,Bushell TJ,Jiang HR</p>	<p>Year 2021</p>
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- ICC/IF (4)
- Flow (136)

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