

# CD4 Monoclonal Antibody (RM4-5), eFluor™ 615, eBioscience™

## Product Details

Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), eFluor™ 615, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RM4-5
Conjugate	eFluor™ 615
Excitation/Emission Max	595/614 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_10853973

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	11 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	1 µg/mL	1 Publication
Immunocytochemistry (ICC/IF)	Assay-Dependent	3 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 immunocytochemical and immunohistochemical staining of frozen tissue sections (IHC-F).

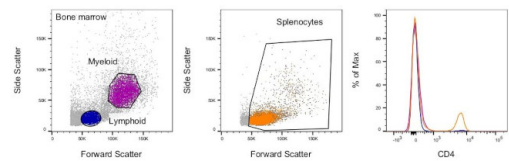
**Applications Tested:** This Rm4-5 antibody has been tested by immunohistochemistry on frozen mouse spleen (IHC-F) at less than or equal to 1 µg/mL. It is recommended that this antibody be carefully titrated for optimal performance in the assay of interest. This product has not been validated for flow cytometric analysis.

**Filter Recommendation:** When using this eFluor® 615 antibody conjugate, we recommend a filter that will capture the 615 emission wavelength (for example, Excitation 560/55, 585LP, Emission 645/75). A standard Alexa Fluor® 594 filter is acceptable.

Excitation: 595 nm; Emission: 615 nm.

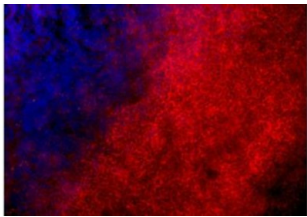
Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD4 Monoclonal Antibody (RM4-5), eFluor™ 615, eBioscience™



CD4 Antibody (42-0042-82)

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 (42-0042-82) in IHC (F)

Immunohistochemistry on frozen mouse spleen using 1 µg/mL Anti-Mouse CD4 eFluor® 615. Nuclei are counterstained with DAPI.

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## Immunohistochemistry (11)

<p><b>Cells</b></p> <p><b>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.</b></p> <p>"Published figure using CD4 monoclonal antibody (Product # 42-0042-82) 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><b>Year</b> 2023</p>
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<p><b>Frontiers in immunology</b></p> <p><b>Black raspberry extract inhibits regulatory T-cell activity in a murine model of head and neck squamous cell carcinoma chemoprevention.</b></p> <p>"Published figure using CD4 monoclonal antibody (Product # 42-0042-82) in Immunohistochemistry"</p> <p>Authors: Ryan NM,Lamenza FF,Upadhaya P,Pracha H,Springer A,Swingler M,Siddiqui A,Oghumu S</p>	<p><b>Year</b> 2022</p>
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[View more IHC references on thermofisher.com](#)

## Immunohistochemistry (PFA fixed) (1)

<p><b>Immunity</b></p> <p><b>T Cell Recruitment to the Intestinal Stem Cell Compartment Drives Immune-Mediated Intestinal Damage after Allogeneic Transplantation.</b></p> <p>"Published figure using CD4 monoclonal antibody (Product # 42-0042-82) in Immunocytochemistry"</p> <p>Authors: Fu YY,Egorova A,Sobieski C,Kuttiyara J,Calafiore M,Takashima S,Clevers H,Hanash AM</p>	<p><b>Year</b> 2019</p>
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## Immunohistochemistry (Frozen) (1)

<p><b>Biology</b></p> <p><b>Increased Levels of IL-16 in the Central Nervous System during Neuroinflammation Are Associated with Infiltrating Immune Cells and Resident Glial Cells.</b></p> <p>"Published figure using CD4 monoclonal antibody (Product # 42-0042-82) in Immunohistochemistry (Frozen)"</p> <p>Authors: Hridi SU,Barbour M,Wilson C,Franssen AJ,Harte T,Bushell TJ,Jiang HR</p>	<p><b>Year</b> 2021</p>
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## More applications with references on thermofisher.com

## ICC/IF (3)

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