

CD4 Monoclonal Antibody (RM4-5), PE-Cyanine5, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotope	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE-Cyanine5, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RM4-5
Conjugate	PE-Cyanine5
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_468698

Applications	Tested	Dilution	Published
Flow Cytometry (Flow)	✓	0.125 µg/test	44 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: The RM4-5 antibody has been reported for use in flow cytometric analysis.

Applications Tested: The RM4-5 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.

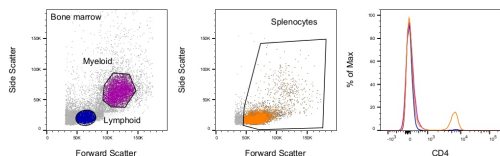
Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix /Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 488-561 nm; Emission: 667 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

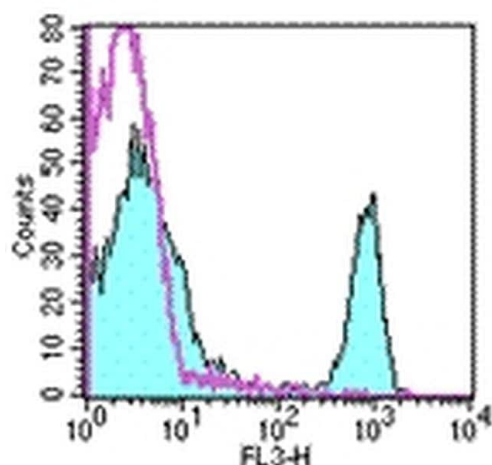
Advanced Verification Data



CD4 Antibody (15-0042-82)

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. Relative expression validation info.

Product Images For CD4 Monoclonal Antibody (RM4-5), PE-Cyanine5, eBioscience™



CD4 Antibody (15-0042-82) in Flow

Staining of BALB/c splenocytes with 0.06 µg of Rat IgG2a K Isotype Control PE-Cyanine5 (Product # 15-4321-80) (open histogram) or 0.06 µg of Anti-Mouse CD4 PE-Cyanine5 (filled histogram). Total cells were used for analysis.

View more figures on thermofisher.com

44 References

Flow Cytometry (44)

Frontiers in neurology

IL-2/Anti-IL-2 Complex Attenuates Inflammation and BBB Disruption in Mice Subjected to Traumatic Brain Injury.

"Published figure using CD4 monoclonal antibody (Product # 15-0042-82) in Flow Cytometry"

Authors: Gao W, Li F, Zhou Z, Xu X, Wu Y, Zhou S, Yin D, Sun D, Xiong J, Jiang R, Zhang J

Species
Not Applicable

Dilution
Not Cited

Year
2018

Nature communications

Modifying the cancer-immune set point using vaccinia virus expressing re-designed interleukin-2.

"Published figure using CD4 monoclonal antibody (Product # 15-0042-82) in Flow Cytometry"

Authors: Liu Z, Ge Y, Wang H, Ma C, Feist M, Ju S, Guo ZS, Bartlett DL

Species
Not Applicable

Dilution
Not Cited

Year
2018

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