

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

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotope	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PerCP-Cyanine5.5, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RM4-5
Conjugate	PerCP-Cyanine5.5
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_1107001

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.25 µg/test	88 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

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.

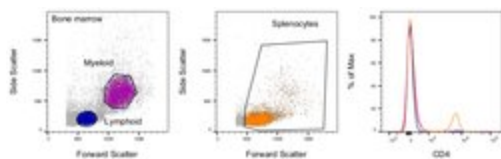
Applications Reported: This RM4-5 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This RM4-5 antibody has been tested by flow cytometric analysis of mouse 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Excitation: 488 nm; Emission: 695 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

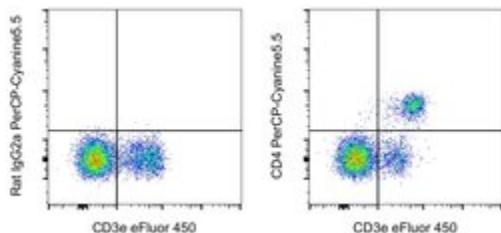
Advanced Verification Data



CD4 Antibody (45-0042-82)

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), PerCP-Cyanine5.5, eBioscience™



CD4 Antibody (45-0042-82) in Flow

C57BL/6 mouse splenocytes were stained with CD3e Monoclonal Antibody, eFluor 450 (Product # 48-0031-82) and 0.06 μg of Rat IgG2a kappa Isotype Control, PerCP-Cyanine5.5 (Product # 45-4321-80) (left) or 0.06 μg of CD4 Monoclonal Antibody, PerCP-Cyanine5.5 (right). Cells in the lymphocyte gate were used for analysis.

Flow Cytometry (88)

Clinical and translational allergy

The efficacy of oral and subcutaneous antigen-specific immunotherapy in murine cow's milk- and peanut allergy models.

"45-0042 was used in Flow cytometry/Cell sorting to compare oral immunotherapy and subcutaneous immunotherapy models for cows milk and peanut allergy."

Authors: Vonk MM,Wagenaar L,Pieters RHH,Knippels LMJ,Willemsen LEM,Smit JJ,van Esch BCAM,Garssen J

Species
Mouse

Dilution
1:200

Year
2020

Bio-protocol

Measurement of CD8 and CD4 T Cell Responses in Mouse Lungs.

"45-0042 was used in Flow cytometry/Cell sorting to study the methods used to characterise the CD8 and CD4 T cell responses after a viral challenge in the lung."

Authors: Fett C,Zhao J,Perlman S

Species
Mouse

Dilution
Not Cited

Year
2020

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

Miscellaneous PubMed (1)

Nature communications

Itk is required for Th9 differentiation via TCR-mediated induction of IL-2 and IRF4.

"45-0042 was used in Magnetic cell separation to investigate the role of IL-9 in allergic asthma and autoimmunity, showing that Itk is required for Th9 differentiation via TCR-mediated induction of IL-2 and IRF4."

Authors: Gomez-Rodriguez J,Meylan F,Handon R,Hayes ET,Anderson SM,Kirby MR,Siegel RM,Schwartzberg PL

Species
Mouse

Dilution
Not Cited

Year
2016

More applications with references on thermofisher.com

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