

CD4 Monoclonal Antibody (RM4-5), Biotin, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Human, Mouse
Host/Isotope	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Biotin, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RM4-5
Conjugate	Biotin
Form	Liquid
Concentration	0.5 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_466329

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.25 µg/test	54 Publications
Immunofluorescence (IF)	-	2 Publications
Immunohistochemistry (IHC)	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

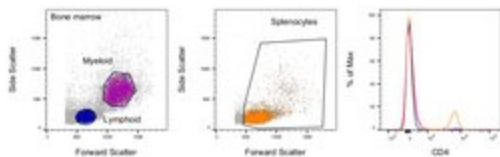
Description: The RM4-5 monoclonal antibody reacts with the mouse CD4 molecule, a 55 kDa cell surface receptor expressed by a majority of thymocytes, subpopulation of mature T cells and dendritic cells. CD4 binds to MHC class II on the surface of antigen presenting cells and plays an important role both 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: The RM4-5 antibody has been reported for use in flow cytometric analysis.

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 0.25 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.

Filtration: 0.2 µm post-manufacturing filtered.

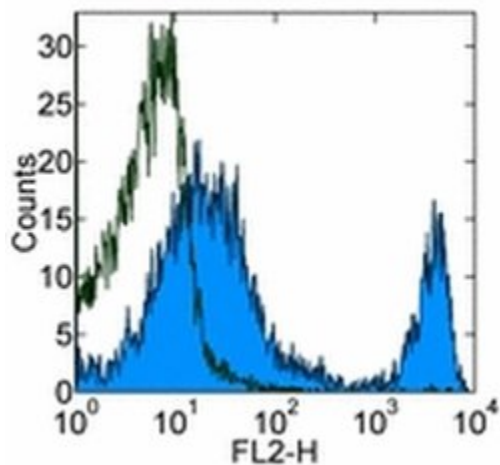
Advanced Verification Data



CD4 Antibody (13-0042-82)

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), Biotin, eBioscience™



CD4 Antibody (13-0042-82) in Flow

Staining of C57BL/6 splenocytes with 0.125 µg of Rat IgG2a K Isotype Control Biotin (Product # 13-4321-82) (open histogram) or 0.125 µg of Anti-Mouse CD4 Biotin (filled histogram) followed by Streptavidin PE (Product # 12-4317-87). Total viable cells were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

Flow Cytometry (54)

Frontiers in immunology

Mutation of an L-Type Calcium Channel Gene Leads to T Lymphocyte Dysfunction.

"Published figure using CD4 monoclonal antibody (Product # 13-0042-82) in Flow Cytometry"

Authors: Fenninger F, Han J, Stanwood SR, Nohara LL, Arora H, Choi KB, Munro L, Pfeifer CG, Shanina I, Horwitz MS, Jefferies WA

Species
Not Applicable

Dilution
Not Cited

Year
2020

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 # 13-0042-82) 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
2020

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

Immunohistochemistry (1)

Cancer prevention research (Philadelphia, Pa.)

PD-1 Blockade Prevents the Development and Progression of Carcinogen-Induced Oral Premalignant Lesions.

"Published figure using CD4 monoclonal antibody (Product # 13-0042-82) in Immunohistochemistry"

Authors: Wang J, Xie T, Wang B, William WN, Heymach JV, El-Naggar AK, Myers JN, Caulin C

Species
Not Applicable

Dilution
Not Cited

Year
2017

Immunofluorescence (2)

Nature communications

dNP2 is a blood-brain barrier-permeable peptide enabling ctCTLA-4 protein delivery to ameliorate experimental autoimmune encephalomyelitis.

"Published figure using CD4 monoclonal antibody (Product # 13-0042-82) in Flow Cytometry"

Authors: Lim S, Kim WJ, Kim YH, Lee S, Koo JH, Lee JA, Yoon H, Kim DH, Park HJ, Kim HM, Lee HG, Yun Kim J, Lee JU, Hun Shin J, Kyun Kim L, Doh J, Kim H, Lee SK, Bothwell ALM, Suh M, Choi JM

Species
Not Applicable

Dilution
Not Cited

Year
2015

More applications with references on thermofisher.com

Misc (1)

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