

CD4 Monoclonal Antibody (RM4-5), Alexa Fluor 700, 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), Alexa Fluor 700, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RM4-5
Conjugate	Alexa Fluor® 700
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_494000

Applications	Tested	Dilution	Published
Flow Cytometry (Flow)	✓	0.125 µg/test	51 Publications
Immunofluorescence (IF)	-		2 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.

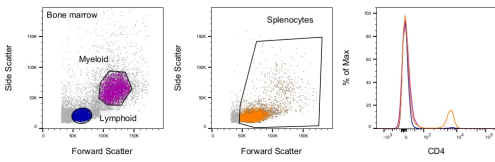
Applications Tested: This RM4-5 antibody has been tested by flow cytometric analysis of mouse thymocyte and splenocyte suspensions. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. 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.

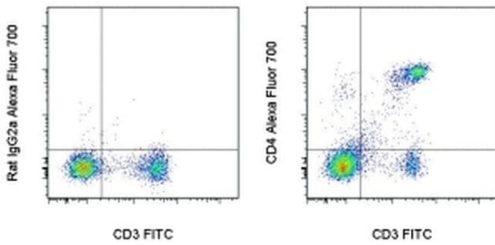
Advanced Verification Data



CD4 Antibody (56-0042-82)

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), Alexa Fluor 700, eBioscience™



CD4 Antibody (56-0042-82) 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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Flow Cytometry (51)

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 # 56-0042-82) 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 # 56-0042-82) 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

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

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 # 56-0042-82) 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

PLoS one

Characterization of two distinct lymphoproliferative diseases caused by ectopic expression of the Notch ligand DLL4 on T cells.

"Published figure using CD4 monoclonal antibody (Product # 56-0042-82) in Flow Cytometry"

Authors: Xiong H, Maraver A, Latkowski JA, Henderson T, Schlessinger K, Ding Y, Shen J, Tadokoro CE, Lafaille JJ

Species
Human
Not Applicable

Dilution
Not Cited
Not Cited

Year
2015

More applications with references on thermofisher.com

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