

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

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), PE, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RM4-5
Conjugate	PE
Excitation/Emission Max	565/576 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_465510

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	0.125 µg/test	168 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.

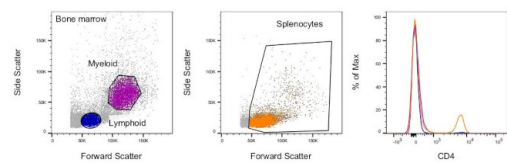
Applications Reported: The RM4-5 antibody has been reported for use in flow cytometric analysis.

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.

Excitation: 488-561 nm; **Emission:** 578 nm; **Laser:** Blue Laser, Green Laser, Yellow-Green Laser.

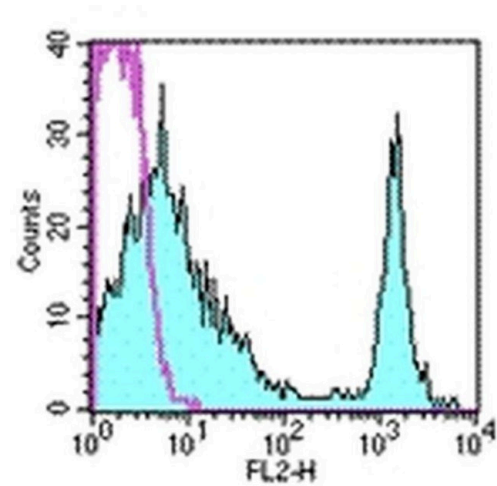
Filtration: 0.2 µm post-manufacturing filtered.

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



CD4 Antibody (12-0042-82)

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 (12-0042-82) in Flow

Staining of BALB/c splenocytes with staining buffer (autofluorescence) (open histogram) or 0.125 µg of Anti-Mouse CD4 PE (filled histogram). Total viable cells were used for analysis.

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Immunohistochemistry (1)

<p>Science advances</p> <p>STING couples with PI3K to regulate actin reorganization during BCR activation.</p> <p>"Published figure using CD4 monoclonal antibody (Product # 12-0042-82) in Immunohistochemistry"</p> <p>Authors: Jing Y,Dai X,Yang L,Kang D,Jiang P,Li N,Cheng J,Li J,Miller H,Ren B,Gong Q,Yin W,Liu Z,Mattila PK,Ning Q, Sun J,Yu B,Liu C</p>	<p>Year 2020</p> <p>Species Mouse</p> <p>Dilution 1:20</p>
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Immunohistochemistry (Frozen) (1)

<p>The Journal of experimental medicine</p> <p>Niche-specific MHC II and PD-L1 regulate CD4+CD8+ intraepithelial lymphocyte differentiation.</p> <p>"Published figure using CD4 monoclonal antibody (Product # 12-0042-82) in Flow Cytometry"</p> <p>Authors: Moon S,Park Y,Hyeon S,Kim YM,Kim JH,Kim H,Park S, Lee KJ,Koo BK,Ha SJ, Lee SW</p>	<p>Year 2021</p> <p>Species Mouse</p>
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Immunocytochemistry (2)

<p>The Journal of experimental medicine</p> <p>Niche-specific MHC II and PD-L1 regulate CD4+CD8+ intraepithelial lymphocyte differentiation.</p> <p>"Published figure using CD4 monoclonal antibody (Product # 12-0042-82) in Flow Cytometry"</p> <p>Authors: Moon S,Park Y,Hyeon S,Kim YM,Kim JH,Kim H,Park S, Lee KJ,Koo BK,Ha SJ, Lee SW</p>	<p>Year 2021</p> <p>Species Mouse</p>
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<p>Experimental and therapeutic medicine</p> <p>Interaction between ICAM1 in endothelial cells and LFA1 in T cells during the pathogenesis of experimental Parkinson's disease.</p> <p>"12-0042-81 was used in Immunocytochemistry, Flow Cytometry to investigate the infiltration of T cells in lesions in the central nervous system, in patients with and without Parkinson's Disease."</p> <p>Authors: Li W,Chen S,Luo Y,Xia Y, Ma Q,Yao Q,Wu J</p>	<p>Year 2020</p> <p>Species Mouse</p> <p>Dilution 1:100</p>
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More applications with references on thermofisher.com

- Flow (168)
- Misc (1)

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