CD4 Monoclonal Antibody (RM4-5), Biotin, 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), 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
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_466329

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	10 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	4 Publications
Flow Cytometry (Flow)	0.25 µg/test	123 Publications
Miscellaneous PubMed (Misc)	-	1 Publication

Product Specific Information

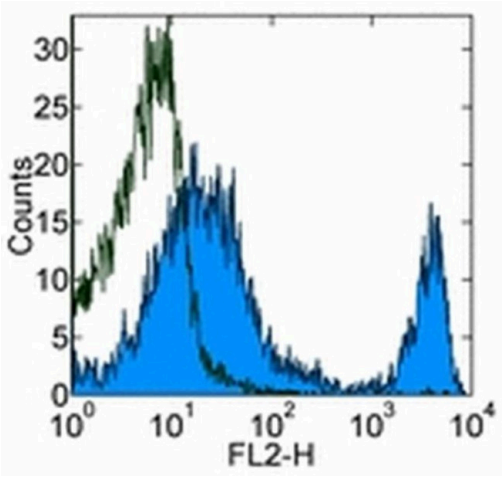
Description: The RM4-5 monoclonal antibody reacts with the mouse CD4 molecule, a 55 kDa cell surface receptor expressed by a majority of thymocytes, subpopulation of mature T cells and dendritic cells. CD4 binds to MHC class II on the surface of antigen presenting cells and plays an important role both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

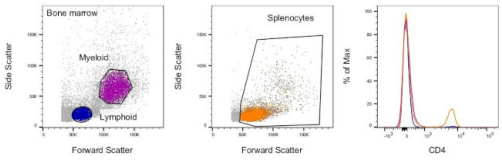
Applications Tested: The RM4-5 antibody has been tested by flow cytometric analysis of mouse thymocytes and splenocytes. This can be used at less than or equal to 0.25 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 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.

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.



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. {RE}

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140 References

Immunohistochemistry (10)

Cells

Year
2023

Complete Freund's Adjuvant Induces a Fibroblast-like Synoviocytes (FLS) Metabolic and Migratory Phenotype in Resident Fibroblasts of the Inoculated Footpad at the Earliest Stage of Adjuvant-Induced Arthritis.

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

Authors: González-Chávez SA,Chaparro-Barrera E,Alvarado-Jáquez MF,Cuevas-Martínez R,Ochoa-Albíztegui RE, Pacheco-Tena C

Frontiers in immunology

Year
2022

Black raspberry extract inhibits regulatory T-cell activity in a murine model of head and neck squamous cell carcinoma chemoprevention.

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

Authors: Ryan NM,Lamenza FF,Upadhaya P,Pracha H,Springer A,Swingler M,Siddiqui A,Oghumu S

View more IHC references on thermofisher.cn

Immunohistochemistry (PFA fixed) (1)

Immunity

Year
2019

T Cell Recruitment to the Intestinal Stem Cell Compartment Drives Immune-Mediated Intestinal Damage after Allogeneic Transplantation.

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

Authors: Fu YY,Egorova A,Sobieski C,Kuttiyara J,Calafiore M,Takashima S,Clevers H,Hanash AM

Immunohistochemistry (Frozen) (1)

Biology

Year
2021

Increased Levels of IL-16 in the Central Nervous System during Neuroinflammation Are Associated with Infiltrating Immune Cells and Resident Glial Cells.

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

Authors: Hridi SU,Barbour M,Wilson C,Franssen AJ,Harte T,Bushell TJ,Jiang HR

More applications with references on thermofisher.cn

ICC/IF (4) **Flow (123)** **Misc (1)**

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