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

Product Details	
Size	50 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), FITC, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RM4-5
Conjugate	FITC
Excitation/Emission Max	498/517 nm
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_464895

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	9 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	2 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	7 Publications
Immunocytochemistry (ICC/IF)	-	7 Publications
Flow Cytometry (Flow)	0.25 µg/test	303 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.

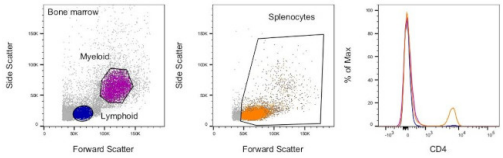
Applications Reported: The RM4-5 antibody has been reported for use in flow cytometric analysis.

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.

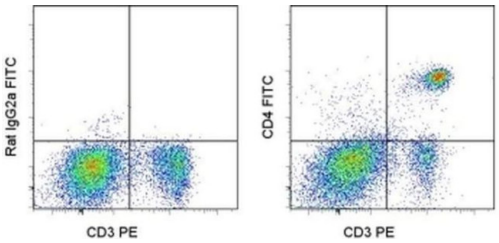
Excitation: 488 nm; Emission: 520 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

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



CD4 Antibody (11-0042-81)
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 (11-0042-81) in Flow
Staining of C57BL/6 splenocytes with Anti-Mouse CD3e PE (Product # 12-0031-82) and 0.125 µg of Rat IgG2a K Isotype Control FITC (Product # 11-4321-42) (left) or 0.125 µg of Anti-Mouse CD4 FITC (right). Cells in the lymphocyte gate were used for analysis.

View more figures on thermofisher.cn

329 References

Immunohistochemistry (9)

Cells

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 # 11-0042-82) in Immunohistochemistry"

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

Year
2023

Cancers

Epithelial Mutant p53 Promotes Resistance to Anti-PD-1-Mediated Oral Cancer Immunoprevention in Carcinogen-Induced Mouse Models.

"Published figure using CD4 monoclonal antibody (Product # 11-0042-82) in Immunohistochemistry"

Authors: Wang J,Hu Y,Escamilla-Rivera V,Gonzalez CL,Tang L,Wang B,El-Naggar AK,Myers JN,Caulin C

Year
2021

View more IHC references on thermofisher.cn

Immunohistochemistry (Paraffin) (2)

Frontiers in immunology

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 # 11-0042-82) in Immunohistochemistry (Paraffin)"

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

Year
2022

PloS one

Anti-CD154 mAb and rapamycin induce T regulatory cell mediated tolerance in rat-to-mouse islet transplantation.

"11-0042 was used in Immunohistochemistry on paraffin embedded tissues to investigate the effect of combined RAPA /MR1 treatment on rat-to-mouse islet xenograft survival, showing that it induces T regulatory cell mediated tolerance."

Authors: Muller YD,Mai G,Morel P,Serre-Beinier V,Gonelle-Gispert C,Yung GP,Ehirchiou D,Wyss JC,Bigenzahn S,Irla M,Heusser C,Golshayan D,Seebach JD,Wekerle T,Bühler LH

Year
2010

Species
Mouse

More applications with references on thermofisher.cn

IHC (PFA) (1) IHC (F) (7) ICC/IF (7) Flow (303)

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