

CD4 Monoclonal Antibody (RM4-5), Super Bright™ 436, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	RM4-5
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 nm
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2716976

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	8 Publications
Immunohistochemistry (PFA fixed) (IHC (PFA))	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	3 Publications
Flow Cytometry (Flow)	0.5 µg/test	60 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 splenocytes. This may be used at less than or equal to 0.5 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.

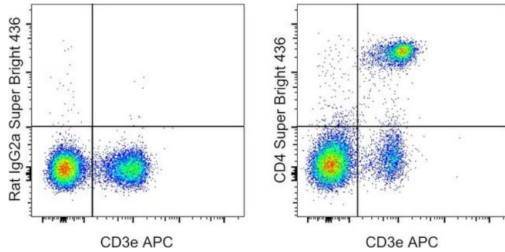
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

Excitation: 405 nm; Emission: 436 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD4 Monoclonal Antibody (RM4-5), Super Bright™ 436, eBioscience™



CD4 Antibody (62-0042-80) in Flow

BALB/c mouse splenocytes were stained with CD3e Monoclonal Antibody, APC (Product # 17-0031-82) and 0.25 µg of Rat IgG2a kappa Isotype Control, Super Bright 436 (Product # 62-4321-82) (left) or 0.25 µg of CD4 Monoclonal Antibody, Super Bright 436 (right). Cells in the lymphocyte gate were used for analysis.

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

73 References

Immunohistochemistry (8)

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 # 62-0042-82) in Immunohistochemistry"

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

Year
2023

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 # 62-0042-82) in Immunohistochemistry"

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

Year
2022

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

Immunohistochemistry (PFA fixed) (1)

Immunity

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

"Published figure using CD4 monoclonal antibody (Product # 62-0042-82) in Immunocytochemistry"

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

Year
2019

Immunohistochemistry (Frozen) (1)

Biology

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 # 62-0042-82) in Immunohistochemistry (Frozen)"

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

Year
2021

More applications with references on thermofisher.com

[ICC/IF \(3\)](#) [Flow \(60\)](#)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.