

CD54 (ICAM-1) Monoclonal Antibody (eBioKAT-1 (KAT-1, KAT1)), Super Bright™ 436, eBioscience™

Product Details	
Size	25 µg
Host/Isotype	Rat / IgG2a, kappa
Recommended Isotype Control	Rat IgG2a kappa Isotype Control (eBR2a), Super Bright™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioKAT-1 (KAT-1, KAT1)
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 nm
Form	Liquid
Concentration	0.2 mg/mL
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2762736

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	2 Publications
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	-

Product Specific Information

Description: The eBioKAT-1 monoclonal antibody reacts with mouse CD54 (ICAM-1), which is a 95 kDa member of the immunoglobulin superfamily. CD54 is expressed at low levels on leukocytes and high endothelial venules, and expression increases in response to inflammatory cytokines. ICAM-1 binds to LFA-1 and this interaction is required for the transendothelial migration of T cells. ICAM-1-deficient mice are viable, however the migration of leukocytes to sites of inflammation is reduced leading to impaired immune and inflammatory responses. Based on the regulated expression of ICAM-1, it has been suggested that ICAM-1 may increase leukocyte extravasation at sites of inflammation, whereas the constitutively high expression of ICAM-2 mediates leukocyte traffic into non-inflamed tissue. The eBioKAT-1 monoclonal antibody recognizes a different epitope than the YN1/1.7.4 monoclonal antibody.

Applications Reported: This eBioKAT-1 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This eBioKAT-1 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.

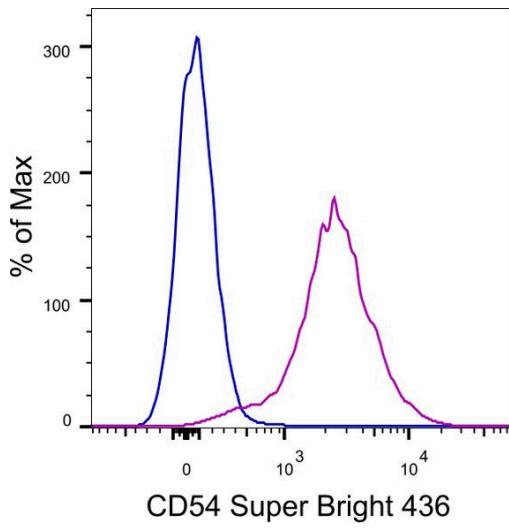
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

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 CD54 (ICAM-1) Monoclonal Antibody (eBioKAT-1 (KAT-1, KAT1)), Super Bright™ 436, eBioscience™



CD54 (ICAM-1) Antibody (62-0542-80) in Flow

C57BL/6 mouse splenocytes were stained with 0.25 µg of Rat IgG2a kappa Isotype Control, Super Bright 436 (Product # 62-4321-82) (blue histogram) or 0.25 µg of CD54 Monoclonal Antibody, Super Bright 436 (purple histogram). Cells in the lymphocyte gate were used for analysis.

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

Immunohistochemistry (2)

Science advances

Spatially targeted brain cancer immunotherapy with closed-loop controlled focused ultrasound and immune checkpoint blockade.

"Published figure using CD54 (ICAM-1) monoclonal antibody (Product # 62-0542-82) in Immunohistochemistry"

Authors: Lee H,Guo Y,Ross JL,Schoen S,Degertekin FL,Arvanitis C

Year
2022

Molecules (Basel, Switzerland)

Effects of Grape Polyphenols on the Life Span and Neuroinflammatory Alterations Related to Neurodegenerative Parkinson Disease-Like Disturbances in Mice.

"Published figure using CD54 (ICAM-1) monoclonal antibody (Product # 62-0542-82) in Immunohistochemistry"

Authors: Tikhonova MA,Tikhonova NG,Tenditnik MV,Ovsyukova MV,Akopyan AA,Dubrovina NI,Amstislavskaya TG, Khlestkina EK

Year
2020

Immunocytochemistry (1)

International journal of molecular sciences

Thrombin Inhibition Prevents Endothelial Dysfunction and Reverses 20-HETE Overproduction without Affecting Blood Pressure in Angiotensin II-Induced Hypertension in Mice.

"Published figure using CD54 (ICAM-1) monoclonal antibody (Product # 62-0542-82) in Immunocytochemistry"

Authors: Kij A,Bar A,Przyborowski K,Proniewski B,Mateuszuk L,Jaształ A,Kieronka-Rudek A,Marczyk B,Matyjaszczyk-Gwarda K,Tworzydło A,Enggaard C,Hansen PBL,Jensen B,Walczak M,Chlopicki S

Year
2021

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