

CD54 (ICAM-1) Monoclonal Antibody (HA58), Super Bright™ 600, eBioscience™

| Product Details | |
|-----------------------------|--|
| Size | 100 Tests |
| Species Reactivity | Human |
| Host/Isotype | Mouse / IgG1, kappa |
| Recommended Isotype Control | Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 600, eBioscience™ |
| Class | Monoclonal |
| Type | Antibody |
| Clone | HA58 |
| Conjugate | Super Bright™ 600 |
| Form | Liquid |
| Concentration | 5 µL/Test |
| 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_2784857 |

| Applications | Tested Dilution | Publications |
|-----------------------------|---------------------|----------------|
| Flow Cytometry (Flow) | 5 µL (0.25 µg)/test | 2 Publications |
| Neutralization (Neu) | - | 1 Publication |
| Functional Assay (FN) | - | 1 Publication |
| Miscellaneous PubMed (Misc) | - | 1 Publication |

Product Specific Information

Description: The HA58 monoclonal antibody reacts with human CD54 (InterCellular Adhesion Molecule-1, ICAM-1), a 90-110 kDa transmembrane glycoprotein expressed by monocytes, lymphocytes and endothelial cells. Expression of CD54 is upregulated on activated lymphocytes. Interaction of CD54 with its ligand CD11a is important in the inflammatory response.

Applications Reported: This HA58 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This HA58 antibody has been pre-diluted and tested by flow cytometric analysis of normal human peripheral blood cells. This may be used at 5 µL (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 10⁵ to 10⁸ cells/test.

Super Bright 600 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 600 nm. We recommend using a 610/20 bandpass filter. 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.

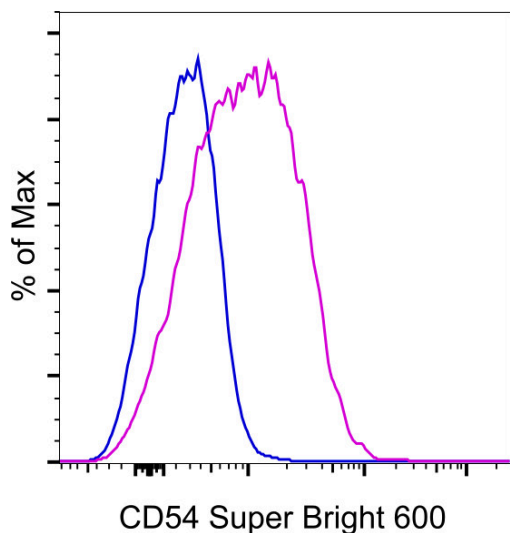
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222-49) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-57) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 600 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 (HA58), Super Bright™ 600, eBioscience™



CD54 (ICAM-1) Antibody (63-0549-42) in Flow

Normal human peripheral blood cells were stained with Mouse IgG1 kappa Isotype Control, Super Bright 600 (Product # 63-4714-82) (blue histogram) or CD54 Monoclonal Antibody, Super Bright 600 (purple histogram). Cells in the lymphocyte gate were used for analysis.

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

5 References

Flow Cytometry (2)

PLoS pathogens

Pomalidomide restores immune recognition of primary effusion lymphoma through upregulation of ICAM-1 and B7-2.

"Published figure using CD54 (ICAM-1) monoclonal antibody (Product # 63-0549-42) in Flow Cytometry"
Authors: Shrestha P, Davis DA, Jaeger HK, Stream A, Aisabor AI, Yarchoan R

Year
2021

Nature communications

The critical role of SENP1-mediated GATA2 deSUMOylation in promoting endothelial activation in graft arteriosclerosis.

"Published figure using CD54 (ICAM-1) monoclonal antibody (Product # 63-0549-42) in Flow Cytometry"
Authors: Qiu C, Wang Y, Zhao H, Qin L, Shi Y, Zhu X, Song L, Zhou X, Chen J, Zhou H, Zhang H, Tellides G, Min W, Yu L

Year
2017

Neutralization (1)

PLoS pathogens

Pomalidomide restores immune recognition of primary effusion lymphoma through upregulation of ICAM-1 and B7-2.

"Published figure using CD54 (ICAM-1) monoclonal antibody (Product # 63-0549-42) in Flow Cytometry"
Authors: Shrestha P, Davis DA, Jaeger HK, Stream A, Aisabor AI, Yarchoan R

Year
2021

Functional Assay (1)

Nature communications

Preservation of microvascular barrier function requires CD31 receptor-induced metabolic reprogramming.

"Published figure using CD54 (ICAM-1) monoclonal antibody (Product # 63-0549-42) in Functional assay"
Authors: Cheung KCP, Fanti S, Mauro C, Wang G, Nair AS, Fu H, Angeletti S, Spoto S, Fogolari M, Romano F, Akseptijevic D, Liu W, Li B, Cheng L, Jiang L, Vuononvirta J, Poobalasingam TR, Smith DM, Ciccozzi M, Solito E, Marelli-Berg FM

Year
2020

More applications with references on thermofisher.com

Misc (1)

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.