

CD39 Monoclonal Antibody (eBioA1 (A1)), Super Bright™ 436, 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™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioA1 (A1)
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS with BSA
Contains	0.09% sodium azide
Storage conditions	4°C, store in dark, DO NOT FREEZE!
RRID	AB_2662920

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/Test	6 Publications

Product Specific Information

The eBioA1 monoclonal antibody reacts with human CD39 also known as ectonucleoside triphosphate diphosphohydrolase 1 (ENTPD1) or NTPDase. CD39 is an integral membrane protein with two transmembrane domains and exists as a homotetramer. It is the most prominent ectoenzyme of the immune system. The function of CD39 is to effectively remove toxic extracellular ATP by converting it to ADP or AMP. CD39 is thought to work together with CD73 to hydrolyze ATP and has been well characterized on Langerhans cells. Expression of CD39 was originally identified on activated lymphocytes. Expression is also found on a subset of T cells, B cells and dendritic cells as well as weak staining on monocytes and granulocytes.

Recently, CD39 and CD73 have been found on regulatory T cells (Treg). Expression of CD39 on Treg may facilitate their entry into inflamed areas where high levels of ATP are present. Expression of CD39 on Foxp3+CD4+ cells ranges from 25-45%.

This eBioA1 (A1) antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can 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.

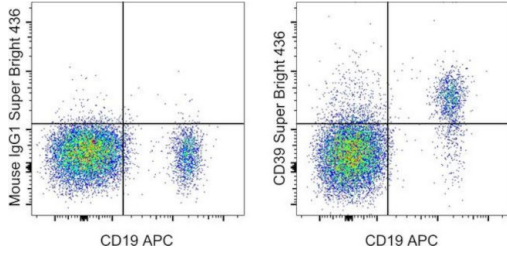
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

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 CD39 Monoclonal Antibody (eBioA1 (A1)), Super Bright™ 436, eBioscience™



CD39 Antibody (62-0399-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD19 APC (Product # 17-0199-42) and Mouse IgG1 K Isotype Control Super Bright 436 (Product # 62-4714-82) (left) or Anti-Human CD39 Super Bright 436 (right). Cells in the lymphocyte gate were used for analysis.

[View more figures on thermofisher.com](#)

6 References

Flow Cytometry (6)

STAR protocols

Protocol for isolation of tumor-derived extracellular vesicles and functional studies on human T cell subsets.

"Published figure using CD39 monoclonal antibody (Product # 62-0399-42) in Flow Cytometry"

Authors: Swatler J, Targoska A, Turos-Korgul L, Mosieniak G, Piwocka K

Year
2024

eLife

Pinpointing the tumor-specific T cells via TCR clusters.

"Published figure using CD39 monoclonal antibody (Product # 62-0399-42) in Flow Cytometry"

Authors: Goncharov MM, Bryushkova EA, Sharaev NI, Skatova VD, Baryshnikova AM, Sharonov GV, Karnaukhov V, Vakhitova MT, Samoylenko IV, Demidov LV, Lukyanov S, Chudakov DM, Serebrovskaya EO

Year
2022

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More applications with references on thermofisher.com

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