

# CD39 Monoclonal Antibody (24DMS1), Super Bright™ 436, eBioscience™

Product Details	
Size	25 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Super Bright™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	24DMS1
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_2637138

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	4 Publications

## Product Specific Information

Description: The 24DMS1 monoclonal antibody reacts with mouse CD39, also known as NTPDase1. E-NTPDases are enzymes that convert nucleoside tri- and diphosphates (NTPDs) into nucleoside monophosphate (NMP), thereby removing toxic extracellular ATP and ADP. CD39 is the dominant member of this family in the immune system and is involved in suppression of inflammation and control of platelet activation. CD39 can impact expression of CD73, another E-NTPase. Together, these molecules influence inflammation responses. CD39 is expressed on B cells, Langerhans cells and most monocytes. In addition, CD39 is found on a subset of CD4+ T cells that are mostly CD25+FoxP3+ T reg cells. T reg cells from CD39-null mice showed impaired suppressive properties in vitro and in vivo.

Applications Reported: This 24DMS1 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 24DMS1 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can 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 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

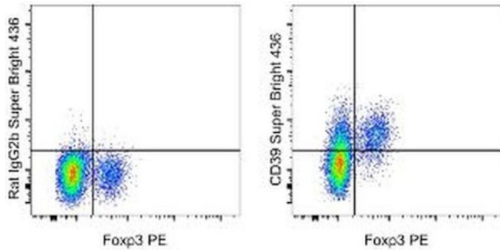
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

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 CD39 Monoclonal Antibody (24DMS1), Super Bright™ 436, eBioscience™



### CD39 Antibody (62-0391-80) in Flow

Mouse splenocytes were surface stained with Anti-Mouse CD4 APC (Product # 17-0042-82) and 0.25 µg of Rat IgG2b K Isotype Control Super Bright 436 (Product # 62-4031-82) (left) or 0.25 µg of Anti-Mouse CD39 Super Bright 436 (right). The cells were then fixed and permeabilized with the Foxp3/Transcription Factor Staining Buffer Set (Product # 00-5523-00) and intracellularly stained with Anti-Mouse/Rat Foxp3 PE (Product # 12-5773-82). CD4-positive cells were used for analysis.

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

## 4 References

### Flow Cytometry (4)

Frontiers in immunology

#### Toll-Like Receptor-Mediated Activation of CD39 Internalization in BMDCs Leads to Extracellular ATP Accumulation and Facilitates P2X7 Receptor Activation.

"Published figure using CD39 monoclonal antibody (Product # 62-0391-82) in Flow Cytometry"

Authors: Zhao R, Qiao J, Zhang X, Zhao Y, Meng X, Sun D, Peng X

Year  
2020

Purinergic signalling

#### Selective deletion of ENTPD1/CD39 in macrophages exacerbates biliary fibrosis in a mouse model of sclerosing cholangitis.

"Published figure using CD39 monoclonal antibody (Product # 62-0391-82) in Flow Cytometry"

Authors: Rothweiler S, Feldbrügge L, Jiang ZG, Csizmadia E, Longhi MS, Vaid K, Enyoji K, Popov YV, Robson SC

Year  
2019

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

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