

CD39 Monoclonal Antibody (24DMS1), Super Bright™ 702, eBioscience™

| Product Details | |
|-----------------------------|---|
| Size | 100 µg |
| Species Reactivity | Mouse |
| Host/Isotype | Rat / IgG2b, kappa |
| Recommended Isotype Control | Rat IgG2b kappa Isotype Control (eB149/10H5), Super Bright™ 702, eBioscience™ |
| Class | Monoclonal |
| Type | Antibody |
| Clone | 24DMS1 |
| Conjugate | Super Bright™ 702 |
| Excitation/Emission Max | 413/702 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_2717143 |

| Applications | Tested Dilution | Publications |
|-----------------------|-----------------|---------------|
| Flow Cytometry (Flow) | 1 µg/test | 1 Publication |

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 (NDTPs) 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 may be used at less than or equal to 1.0 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 702 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 702 nm. We recommend using a 710/50 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.

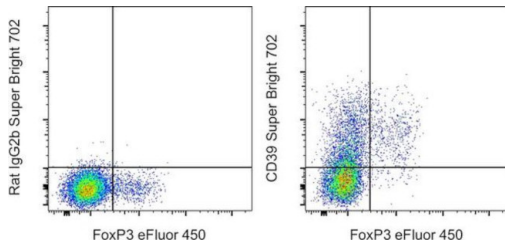
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL of cell sample + 100 µL of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) 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: 702 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™ 702, eBioscience™



CD39 Antibody (67-0391-82) in Flow

C57BL/6 mouse splenocytes were stained with CD4 Monoclonal Antibody, APC (Product # 17-0041-82) and 1.0 µg of Rat IgG2b kappa Isotype Control, Super Bright 702 (Product # 67-4031-82) (left) or 1.0 µg of CD39 Monoclonal Antibody, Super Bright 702 (right). The cells were then fixed and permeabilized with the Fxp3/Transcription Factor Staining Buffer Set (Product # 00-5523-00) and intracellularly stained with Fxp3 Monoclonal Antibody, eFluor 450 (Product # 48-5773-82). CD4-positive cells were used for analysis.

1 Reference

Flow Cytometry (1)

Nature immunology

Autoreactive CD8⁺ T cells are restrained by an exhaustion-like program that is maintained by LAG3.

"Published figure using CD39 monoclonal antibody (Product # 67-0391-82) in Flow Cytometry"

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