

CD59 (Protectin) Monoclonal Antibody (OV9A2), Super Bright™ 645, eBioscience™

| Product Details | |
|-----------------------------|--------------------------------------------------------------------------------|
| Size | 25 Tests |
| Host/Isotype | Mouse / IgG1, kappa |
| Recommended Isotype Control | Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 645, eBioscience™ |
| Class | Monoclonal |
| Type | Antibody |
| Clone | OV9A2 |
| Conjugate | Super Bright™ 645 |
| Excitation/Emission Max | 414/645 nm |
| Form | Liquid |
| Concentration | 5 µL/Test |
| Storage conditions | 4° C, store in dark, DO NOT FREEZE! |
| RRID | AB_2762563 |

| Applications | Tested Dilution | Publications |
|-----------------------|---------------------|----------------|
| Flow Cytometry (Flow) | 5 µL (0.25 µg)/test | 2 Publications |

Product Specific Information

Description: This OV9A2 monoclonal antibody reacts with human CD59, which is also known as Protectin. This GPI-linked membrane glycoprotein shares structural homology with the murine Ly-6 superfamily. CD59 is expressed on all human lymphocytes, monocytes, granulocytes, and erythrocytes. This protein is also expressed on non-hematopoietic cells, including endothelial cells and neurons. By binding the complement components C8 and C9, CD59 inhibits assembly of the membrane attack complex and cytolytic activity by complement. CD59 interacts with CD2 to modulate T cell adhesion, and also plays a role in T cell activation. Finally, altered expression of CD55 and CD59 on human peripheral blood cells has been observed in patients with systemic lupus erythematosus (SLE).

Crossblocking studies indicate that the OV9A2 monoclonal antibody binds the same epitope as MEM-43.

Applications Reported: This OV9A2 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This OV9A2 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 645 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 645 nm. We recommend using a 660/20 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.

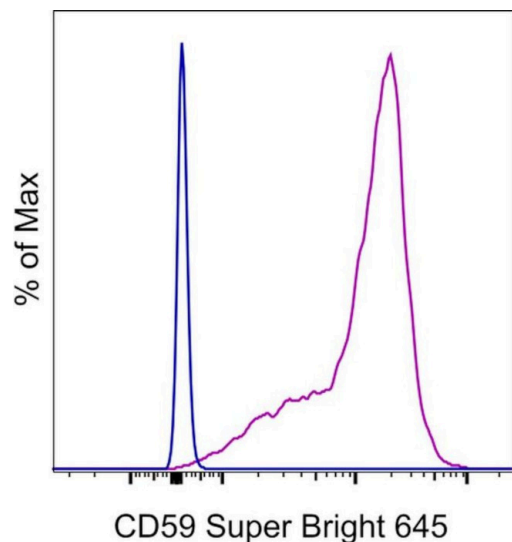
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

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: 645 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD59 (Protectin) Monoclonal Antibody (OV9A2), Super Bright™ 645, eBioscience™



CD59 (Protectin) Antibody (64-0596-41) in Flow

Normal human peripheral blood cells were stained with Mouse IgG1 kappa Isotype Control, Super Bright 645 (Product # 64-4714-82) (blue histogram) or CD59 Monoclonal Antibody, Super Bright 645 (purple histogram). Cells in the lymphocyte gate were used for analysis.

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

2 References

Flow Cytometry (2)

Frontiers in immunology

Inhibition of complement activation by CD55 overexpression in human induced pluripotent stem cell derived kidney organoids.

"Published figure using CD59 (Protectin) monoclonal antibody (Product # 64-0596-42) in Flow Cytometry"

Authors: Gaykema LH, van Nieuwland RY, Dekkers MC, van Essen MF, Heidt S, Zaldumbide A, van den Berg CW, Rabelink TJ, van Kooten C

Year
2023

Science advances

PBRM1 and the glycosylphosphatidylinositol biosynthetic pathway promote tumor killing mediated by MHC-unrestricted cytotoxic lymphocytes.

"Published figure using CD59 (Protectin) monoclonal antibody (Product # 64-0596-42) in Flow Cytometry"

Authors: Menasche BL, Davis EM, Wang S, Ouyang Y, Li S, Yu H, Shen J

Year
2020

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