

# CD9 Monoclonal Antibody (eBioSN4 (SN4 C3-3A2)), Super Bright™ 645, 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™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioSN4 (SN4 C3-3A2)
Conjugate	Super Bright™ 645
Excitation/Emission Max	414/645 nm
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_2762560

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	3 Publications

## Product Specific Information

**Description:** The eBioSN4 monoclonal antibody reacts with human CD9. CD9 is a 24 kDa member of the tetraspanin family, whose members are characterized by the presence of 4 hydrophobic transmembrane domains. CD9 is expressed in platelets, eosinophils, basophils, pre-B cells, activated T cells and neural cell lines. Furthermore, CD9 expression has been associated with a malignant phenotype, including expression on 90% of non T cell acute lymphoblastic leukemia cells and on 50% of chronic lymphocytic and acute myeloblastic leukemias. In platelets, CD9 is expressed in alpha-granules and through association with the integrin alphaIIb/betaIII plays a role in platelet aggregation, as demonstrated by the use of anti-human CD9 antibodies. CD9 has also been shown to induce the aggregation of pre-B cell lines, and the adhesion and migration of pre-B cells and Schwann cells. Additionally, it has been demonstrated that CD9 is able to provide a co-stimulatory signal for T cells independently of CD28, in the absence of antigen-presenting cells. Binding of the eBioSN4 monoclonal antibody partially cross-blocks binding of another anti-human CD9 monoclonal antibody, MM2/57.

**Applications Reported:** This eBioSN4 (SN4 C3-3A2) antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This eBioSN4 (SN4 C3-3A2) antibody has been pre-titrated and tested by flow cytometric analysis of normal human platelets. 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 10<sup>5</sup> to 10<sup>8</sup> 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.

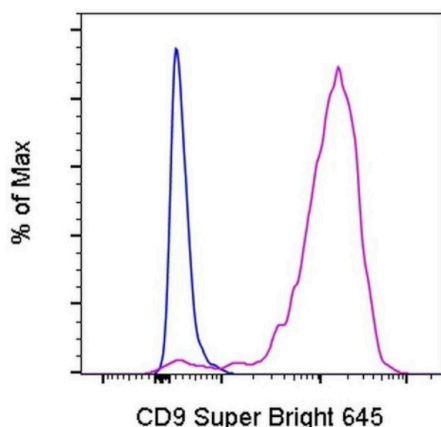
**Light sensitivity:** This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

**Fixation:** Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 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:** 645 nm; **Laser:** Violet Laser

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

## Product Images For CD9 Monoclonal Antibody (eBioSN4 (SN4 C3-3A2)), Super Bright™ 645, eBioscience™



### CD9 Antibody (64-0098-42) 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 CD9 Monoclonal Antibody, Super Bright 645 (purple histogram). Cells in the monocyte gate were used for analysis.

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## Flow Cytometry (3)

Cancers	Year
<b>Extracellular Vesicle Membrane Protein Profiling and Targeted Mass Spectrometry Unveil CD59 and Tetraspanin 9 as Novel Plasma Biomarkers for Detection of Colorectal Cancer.</b> "Published figure using CD9 monoclonal antibody (Product # 64-0098-42) in Flow Cytometry" Authors: Dash S,Wu CC,Wu CC,Chiang SF,Lu YT,Yeh CY,You JF,Chu LJ,Yeh TS,Yu JS	2022

Cells	Year
<b>Anti-Human CD9 Fab Fragment Antibody Blocks the Extracellular Vesicle-Mediated Increase in Malignancy of Colon Cancer Cells.</b> "Published figure using CD9 monoclonal antibody (Product # 64-0098-42) in Flow Cytometry" Authors: Santos MF,Rappa G,Fontana S,Karbanová J,Aalam F,Tai D,Li Z,Pucci M,Alessandro R,Morimoto C,Corbeil D, Loricio A	2022

[View more Flow references on thermofisher.com](#)

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