

# CD56 (NCAM) Monoclonal Antibody (TULY56), Super Bright™ 645, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human, Non-human primate, Rhesus monkey
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	TULY56
Conjugate	Super Bright™ 645
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_2662563

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

## Product Specific Information

Description: This TULY56 monoclonal antibody reacts with human CD56, also known as Neural Cell Adhesion Molecule (NCAM). CD56 is a highly glycosylated transmembrane molecule expressed by neurons and plays a role in the homotypic adhesion of neural cells. In the hematopoietic system, CD56 is expressed on NK cells and a subset of T cells referred to as NKT cells.

Staining with TULY56 does not block binding of CMSSB, suggesting that the two antibodies recognize different epitopes. Additionally, TULY56 performs better after fixation and permeabilization than CMSSB.

The TULY56 monoclonal antibody crossreacts with Rhesus macaque.

Applications Reported: This TULY56 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This TULY56 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 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.

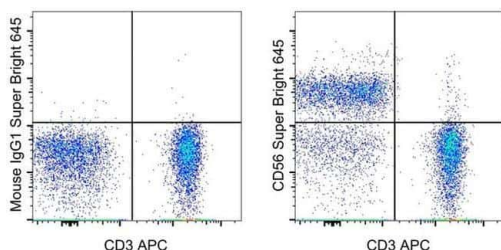
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL of cell sample + 100 µL 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 CD56 (NCAM) Monoclonal Antibody (TULY56), Super Bright™ 645, eBioscience™



### CD56 (NCAM) Antibody (64-0566-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD3 APC (Product # 17-0038-42) and Mouse IgG1 K Isotype Control Super Bright 645 (Product # 64-4714-82) (left) or Anti-Human CD56 (NCAM) Super Bright 645 (right). Cells in the lymphocyte gate were used for analysis.

## 2 References

### Flow Cytometry (2)

Journal of Cancer

#### HDAC Inhibitor, CG-745, Enhances the Anti-Cancer Effect of Anti-PD-1 Immune Checkpoint Inhibitor by Modulation of the Immune Microenvironment.

"Published figure using CD56 (NCAM) monoclonal antibody (Product # 64-0566-42) in Flow Cytometry"

Authors: Kim YD, Park SM, Ha HC, Lee AR, Won H, Cha H, Cho S, Cho JM

Year  
2020

Nature communications

#### Heterogeneity of human bone marrow and blood natural killer cells defined by single-cell transcriptome.

"Published figure using CD56 (NCAM) monoclonal antibody (Product # 64-0566-42) in Flow Cytometry"

Authors: Yang C, Siebert JR, Burns R, Gerbec ZJ, Bonacci B, Rymaszewski A, Rau M, Riese MJ, Rao S, Carlson KS, Routes JM, Verbsky JW, Thakar MS, Malarkannan S

Year  
2019

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