

# CD29 (Integrin beta 1) Monoclonal Antibody (TS2/16), Super Bright™ 600, 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™ 600, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	TS2/16
Conjugate	Super Bright™ 600
Excitation/Emission Max	414/601 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_2734953

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	9 Publications

## Product Specific Information

**Description:** The TS2/16 monoclonal antibody reacts with human CD29, also known as integrin beta 1, an approximately 130 kDa single-pass transmembrane glycoprotein. CD29 complexes with one of nine integrin alpha subunits to form the very late antigen (VLA) subfamily of adhesion molecules. Integrin heterodimers containing CD29 are involved in cell-cell and cell-matrix adhesion. CD29 is expressed broadly on lymphocytes and monocytes, with lower levels of expression on granulocytes. The TS2/16 antibody has been found to possess activating activity for beta 1 integrins.

**Applications Reported:** This TS2/16 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This TS2/16 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 10<sup>5</sup> to 10<sup>8</sup> cells/test.

Super Bright 600 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 600 nm. We recommend using a 610/20 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.

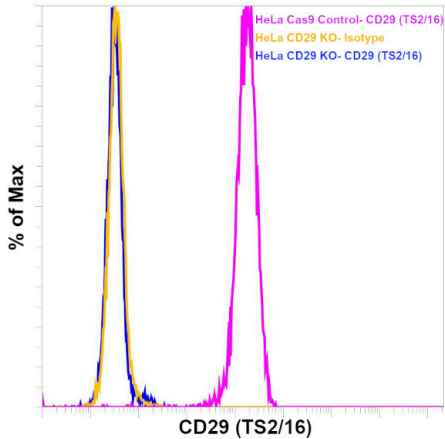
**Light sensitivity:** This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

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 2-8°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorochrome performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 600 nm; Laser: Violet Laser

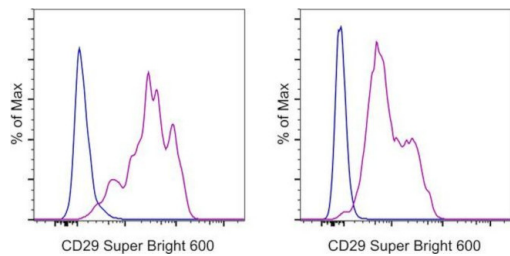
Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

**Product Images For CD29 (Integrin beta 1) Monoclonal Antibody (TS2/16), Super Bright™ 600, eBioscience™**



**CD29 (Integrin beta 1) Antibody (63-0299-42)**

Antibody clone (TS2/16) specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. Loss of signal was observed for target protein in TS2/16 KO cells (blue histogram) compared to the control Cas9 cells (pink histogram) using CD29 antibody (TS2/16). Yellow histogram represents staining with the isotype control. {KO}



**CD29 (Integrin beta 1) Antibody (63-0299-42) in Flow**

Staining of normal human peripheral blood cells with Mouse IgG1 kappa Isotype Control, Super Bright 600 (Product # 63-4714-82) (blue histogram) or CD29 Monoclonal Antibody, Super Bright 600 (purple histogram). Cells in the monocyte (left) or lymphocyte (right) gates were used for analysis.

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Flow Cytometry (9)

Experimental and therapeutic medicine	Year 2023
<b>Comparative proteomic analysis of the mitochondria of menstrual stem cells and ovarian cancer cells.</b>	
"Published figure using CD29 (Integrin beta 1) monoclonal antibody (Product # 63-0299-42) in Flow Cytometry"	
Authors: Chen X,Zhong W,Chang Y,Song T,Liu B,Kong X,Kong Q	
Experimental and therapeutic medicine	Year 2022
<b>Human placental mesenchymal stem cells regulate inflammation via the NFB signaling pathway.</b>	
"Published figure using CD29 (Integrin beta 1) monoclonal antibody (Product # 63-0299-42) in Flow Cytometry"	
Authors: Liu Y,Zhang X,Hu Y,Kang M,Wu Y,Wang Y,Deng C	

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More applications with references on thermofisher.com

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