

CD133 (Prominin-1) Monoclonal Antibody (TMP4), Super Bright™ 436, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Mouse
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	TMP4
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 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_2717001

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

Product Specific Information

Description: The TMP4 monoclonal antibody reacts with human CD133 (Prominin-1), a 120 kDa member of the pentaspan family of proteins, which also includes Prominin-2. Their expression is found within plasma membrane protrusions such as epithelial microvilli. CD133 can exist in a number of alternatively spliced isoforms, and the protein has several N-linked glycosylation sites: the occurrence of both may be tissue-dependent. Human CD133 was first identified as an epitope expressed on CD34+ hematopoietic progenitors. Although the ligand and function of CD133 remain unknown, it has since proven to be very useful as a marker for both stem cells and cancer stem cells. In addition to its expression on hematopoietic precursors, CD133 has been used to identify tumorigenic colon cancer stem cells, brain cancer stem cells, prostate cancer stem cells, in addition to others.

The binding of the TMP4 antibody does not block the binding of another anti-human CD133 antibody, EMK08 (Product # 12-1339) indicating that they recognize distinct epitopes.

Applications Reported: This TMP4 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This TMP4 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.

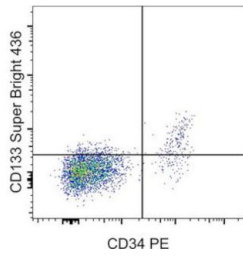
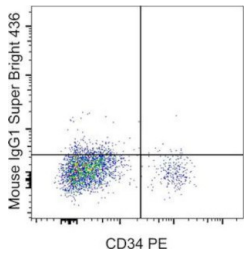
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

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.

Excitation: 405 nm; Emission: 436 nm; Laser: Violet Laser

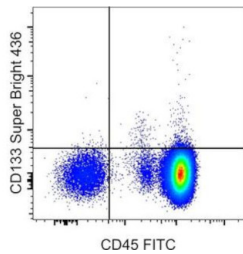
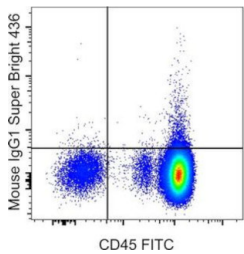
Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD133 (Prominin-1) Monoclonal Antibody (TMP4), Super Bright™ 436, eBioscience™



CD133 (Prominin-1) Antibody (62-1338-42) in Flow

Normal human peripheral blood cells were stained with CD45 Monoclonal Antibody, FITC (Product # 11-9459-42), CD34 Monoclonal Antibody, PE (Product # 12-0349-42) and Mouse IgG1 kappa Isotype Control, Super Bright 436 (Product # 62-4714-82) (left) or CD133 (Prominin-1) Monoclonal Antibody, Super Bright 436 (right). CD45(intermediate) cells in the lymphocyte gate were used for analysis.



CD133 (Prominin-1) Antibody (62-1338-42) in Flow

Normal human peripheral blood cells were stained with CD45 Monoclonal Antibody, FITC (Product # 11-9459-42) and Mouse IgG1 kappa Isotype Control, Super Bright 436 (Product # 62-4714-82) (left) or CD133 (Prominin-1) Monoclonal Antibody, Super Bright 436 (right). Cells in the lymphocyte gate were used for analysis.

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Flow Cytometry (5)

Nature immunology

A genetic disorder reveals a hematopoietic stem cell regulatory network co-opted in leukemia.

"62-1338-42 was used in Flow cytometry/Cell sorting to show that this transcriptional network is co-opted in high-risk leukemias, thereby enabling these cancers to acquire stem cell properties."

Authors: Voit RA, Tao L, Yu F, Cato LD, Cohen B, Fleming TJ, Antoszewski M, Liao X, Fiorini C, Nandakumar SK, Wahlster L, Teichert K, Regev A, Sankaran VG

Year
2023

Species
Mouse

iScience

MCM7 supports the stemness of bladder cancer stem-like cells by enhancing autophagic flux.

"Published figure using CD133 (Prominin-1) monoclonal antibody (Product # 62-1338-42) in Flow Cytometry"

Authors: Mo L, Su B, Xu L, Hu Z, Li H, Du H, Li J

Year
2022

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More applications with references on thermofisher.com

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