

# CD133 (Prominin-1) Monoclonal Antibody (13A4), Super Bright™ 702, eBioscience™

Product Details	
Size	25 µg
Host/Isotype	Rat / IgG1, kappa
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), Super Bright™ 702, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	13A4
Conjugate	Super Bright™ 702
Excitation/Emission Max	413/702 nm
Form	Liquid
Concentration	0.2 mg/mL
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2717162

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	2 Publications
Flow Cytometry (Flow)	0.5 µg/test	4 Publications

## Product Specific Information

**Description:** The 13A4 monoclonal antibody recognizes mouse Prominin-1 (sometimes also referred to as CD133 and, in the case of the human orthologue, as AC133), a 115-120 kDa pentaspan transmembrane (5-TM) domain glycoprotein. Prominin-1 is expressed on primitive cells such as hematopoietic stem and progenitor cells, neural and endothelial stem cells, retina and retinoblastoma, as well as developing epithelium. To date, the function and ligand of Prominin-1 are unknown. The 13A4 antibody does not cross react with rat, human, chicken, or Drosophila antigen but has been reported to work in canine/dog.

**Applications Reported:** This 13A4 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This 13A4 antibody has been tested by flow cytometric analysis of mouse bone marrow cells. This may be used at less than or equal to 0.5 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Super Bright 702 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 702 nm. We recommend using a 710/50 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.

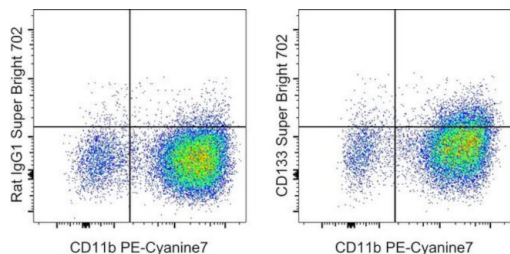
**Light sensitivity:** This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 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: 702 nm; Laser: Violet Laser

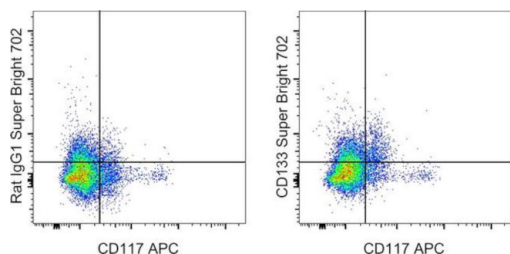
Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

## Product Images For CD133 (Prominin-1) Monoclonal Antibody (13A4), Super Bright™ 702, eBioscience™



### CD133 (Prominin-1) Antibody (67-1331-80) in Flow

BALB/c mouse bone marrow cells were stained with CD11b Monoclonal Antibody, PE-Cyanine7 (Product # 25-0112-82) and 0.25  $\mu$ g of Rat IgG1 kappa Isotype Control, Super Bright 702 (Product # 67-4301-82) (left) or 0.25  $\mu$ g of CD133 (Prominin-1) Monoclonal Antibody, Super Bright 702 (right). Total viable cells were used for analysis.



### CD133 (Prominin-1) Antibody (67-1331-80) in Flow

BALB/c mouse bone marrow cells were stained with CD117 Monoclonal Antibody, APC (Product # 17-1171-82) and 0.25  $\mu$ g of Rat IgG1 kappa Isotype Control, Super Bright 702 (Product # 67-4301-82) (left) or 0.25  $\mu$ g of CD133 (Prominin-1) Monoclonal Antibody, Super Bright 702 (right). Total viable cells were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

## 8 References

### Western Blot (1)

Cancer cell international

#### Musashi-1 promotes cancer stem cell properties of glioblastoma cells via upregulation of YTHDF1.

"Published figure using CD133 (Prominin-1) monoclonal antibody (Product # 67-1331-82) in Western Blot"

Authors: Yarmishyn AA, Yang YP, Lu KH, Chen YC, Chien Y, Chou SJ, Tsai PH, Ma HI, Chien CS, Chen MT, Wang ML

Year  
2020

### Immunohistochemistry (1)

iScience

#### Prominin 1 and Notch regulate ciliary length and dynamics in multiciliated cells of the airway epithelium.

"Published figure using CD133 (Prominin-1) monoclonal antibody (Product # 67-1331-82) in Immunocytochemistry"

Authors: Serra CFH, Liu H, Qian J, Mori M, Lu J, Cardoso WV

Year  
2022

### Immunocytochemistry (2)

iScience

#### Prominin 1 and Notch regulate ciliary length and dynamics in multiciliated cells of the airway epithelium.

"Published figure using CD133 (Prominin-1) monoclonal antibody (Product # 67-1331-82) in Immunocytochemistry"

Authors: Serra CFH, Liu H, Qian J, Mori M, Lu J, Cardoso WV

Year  
2022

Journal of the American Society of Nephrology : JASN

#### Lovastatin-Induced Phosphatidylinositol-4-Phosphate 5-Kinase Diffusion from Microvilli Stimulates ROMK Channels.

"Published figure using CD133 (Prominin-1) monoclonal antibody (Product # 67-1331-82) in Immunocytochemistry"

Authors: Liu BC, Yang LL, Lu XY, Song X, Li XC, Chen G, Li Y, Yao X, Humphrey DR, Eaton DC, Shen BZ, Ma HP

Year  
2015

### More applications with references on thermofisher.com

### Flow (4)

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