

CD144 (VE-cadherin) Monoclonal Antibody (eBioBV13 (BV13)), Super Bright™ 600, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Host/Isotype	Rat / IgG1, kappa
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), Super Bright™ 600, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioBV13 (BV13)
Conjugate	Super Bright™ 600
Excitation/Emission Max	414/601 nm
Form	Liquid
Concentration	0.2 mg/mL
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_2744842

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	2 Publications
Immunocytochemistry (ICC/IF)	-	4 Publications
Flow Cytometry (Flow)	1 µg/test	3 Publications

Product Specific Information

Description: The eBioBV13 (BV13) monoclonal antibody reacts with mouse VE-Cadherin (CD144). VE-Cadherin is a 120 kDa member of the type II Cadherin family, characterized by the presence of 5 extracellular cadherin domains (ECD), and anchored to the actin cytoskeleton through their cytoplasmic tail. VE-Cadherin mediates homophilic adhesion between neighbouring endothelial cells and is localized within specialized structures at cell-cell contacts, called adherens junctions. VE-Cadherin is expressed constitutively throughout the entire vasculature, and is required for numerous endothelial cell functions including migration, survival, contact-dependent growth inhibition and endothelial cell assembly into tubular structures. Furthermore, it is thought that VE-Cadherin+CD45- cells from the yolk sac or aorta-gonad-mesonephros (AGM) have the potential to give rise to hematopoietic cells.

Applications Reported: This eBioBV13 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This eBioBV13 antibody has been tested by flow cytometric analysis of mouse bEnd.3 cells. This may be used at less than or equal to 1.0 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. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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.

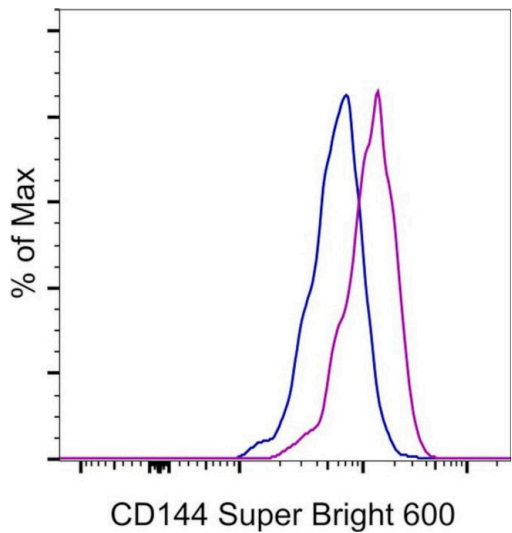
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100 µL of cell sample + 100 µL 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: 600 nm; Laser: Violet Laser

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

Product Images For CD144 (VE-cadherin) Monoclonal Antibody (eBioBV13 (BV13)), Super Bright™ 600, eBioscience™



CD144 (VE-cadherin) Antibody (63-1441-82) in Flow
Staining of bEnd-3 cells with 1.0 µg of Rat IgG1 kappa Isotype Control, Super Bright 600 (Product # 63-4301-82) (blue histogram) or 1.0 µg of CD144 (VE-cadherin) Monoclonal Antibody, Super Bright 600 (purple histogram). Total viable cells were used for analysis.

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

Western Blot (1)

Aging cell

Monomeric C-reactive protein via endothelial CD31 for neurovascular inflammation in an ApoE genotype-dependent pattern: A risk factor for Alzheimer's disease?

"Published figure using CD144 (VE-cadherin) monoclonal antibody (Product # 63-1441-82) in Western Blot"

Authors: Zhang Z,Na H,Gan Q,Tao Q,Alekseyev Y,Hu J,Yan Z,Yang JB,Tian H,Zhu S,Li Q,Rajab IM,Blusztajn JK,Wolozin B,Emili A,Zhang X,Stein T,Potempa LA,Qiu WQ

Year
2021

Immunohistochemistry (2)

JCI insight

Flow pattern-dependent mitochondrial dynamics regulates the metabolic profile and inflammatory state of endothelial cells.

"Published figure using CD144 (VE-cadherin) monoclonal antibody (Product # 63-1441-82) in Immunohistochemistry"

Authors: Hong SG,Shin J,Choi SY,Powers JC,Meister BM,Sayoc J,Son JS,Tierney R,Recchia FA,Brown MD,Yang X,Park JY

Year
2022

The Journal of cell biology

VE-cadherin endocytosis controls vascular integrity and patterning during development.

"Published figure using CD144 (VE-cadherin) monoclonal antibody (Product # 63-1441-82) in Immunohistochemistry"

Authors: Grimsley-Myers CM,Isaacson RH,Cadwell CM,Campos J,Hernandes MS,Myers KR,Seo T,Giang W,Griendling KK,Kowalczyk AP

Year
2020

Immunocytochemistry (4)

Cell death & disease

Knockout RAGE alleviates cardiac fibrosis through repressing endothelial-to-mesenchymal transition (EndMT) mediated by autophagy.

"Published figure using CD144 (VE-cadherin) monoclonal antibody (Product # 63-1441-82) in Flow Cytometry"

Authors: Zhang L,He J,Wang J,Liu J,Chen Z,Deng B,Wei L,Wu H,Liang B,Li H,Huang Y,Lu L,Yang Z,Xian S,Wang L

Year
2021

[View more ICC/IF references on thermofisher.com](#)

More applications with references on thermofisher.com

Flow (3)

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