

CD144 (VE-cadherin) Monoclonal Antibody (eBioBV13 (BV13)), Functional Grade, eBioscience™

Product Details	
Size	50 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG1, kappa
Recommended Isotype Control	Rat IgG1 kappa Isotype Control (eBRG1), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	eBioBV13 (BV13)
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Storage conditions	4° C
RRID	AB_842778

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-Dependent	3 Publications
Immunohistochemistry (IHC)	-	3 Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	-
Immunocytochemistry (ICC/IF)	-	3 Publications
Flow Cytometry (Flow)	1 µg/test	9 Publications
ELISA (ELISA)	-	1 Publication
Immunoprecipitation (IP)	Assay-Dependent	-
ChIP assay (ChIP)	-	1 Publication
Functional Assay (FN)	Assay-Dependent	1 Publication
Peptide array (Array)	-	1 Publication

Product Specific Information

Description: The 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 (BV13) antibody has been reported for use in flow cytometric analysis, immunoprecipitation, immunoblotting (WB), and immunohistology staining of frozen tissue sections. Intravenous injection of BV13 has been shown to induce a concentration- and time-dependent increase in vascular permeability in the heart and lungs.

Applications Tested: This eBioBV13 (BV13) antibody has been tested by flow cytometric analysis of bEnd.3 cells. This can be used at less than or equal to 1 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.

Storage and handling: Use in a sterile environment.

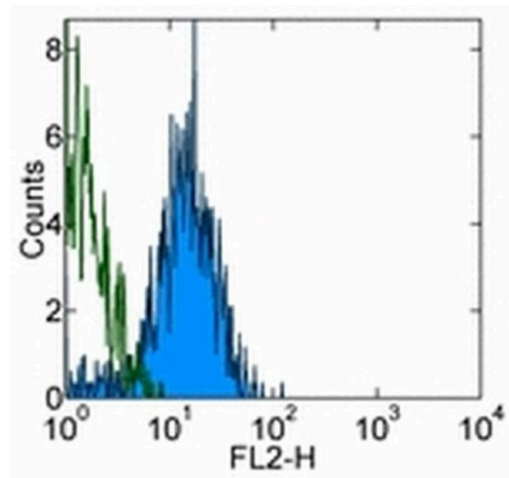
Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

Product Images For CD144 (VE-cadherin) Monoclonal Antibody (eBioBV13 (BV13)), Functional Grade, eBioscience™



CD144 (VE-cadherin) Antibody (16-1441-81) in Flow
Staining of bEnd-3 cell line with 0.5 µg of Rat IgG1 kappa Isotype Control Purified (Product # 14-4301-82) (open histogram) or 0.5 µg of Anti-Mouse CD144 (VE-Cadherin) Purified (filled histogram) followed by Anti-Rat IgG PE. Total viable cells were used for analysis.

[View more figures on thermofisher.com](#)

Western Blot (3)

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 # 16-1441-82) in Western Blot"

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

eLife

Suppression of ischemia in arterial occlusive disease by JNK-promoted native collateral artery development.

"Published figure using CD144 (VE-cadherin) monoclonal antibody (Product # 16-1441-82) in Western Blot"

Authors: Ramo K,Sugamura K,Craige S,Keaney JF,Davis RJ

Year
2016

[View more WB references on thermofisher.com](#)

Immunohistochemistry (3)

eLife

Cellular cartography of the organ of Corti based on optical tissue clearing and machine learning.

"16-1441 was used in Immunohistochemistry to report a new analytical pipeline, based on optical clearing of tissue, for the construction of a single-cell resolution map of the organ of Corti."

Authors: Urata S,Iida T,Yamamoto M,Mizushima Y,Fujimoto C,Matsumoto Y,Yamasoba T,Okabe S

Year
2019

Species
Mouse

Dilution
1:500

FASEB journal : official publication of the Federation of American Societies for Experimental Biology

Discontinuous LYVE-1 expression in corneal limbal lymphatics: dual function as microvalves and immunological hot spots.

"16-1441 was used in Immunofluorescence to investigate how LYVE-1(-) lymphatic endothelium could serve as microvalves and immunological hot spots."

Authors: Nakao S,Zandi S,Faez S,Kohno R,Hafezi-Moghadam A

Year
2012

Species
Mouse

[View more IHC references on thermofisher.com](#)

More applications with references on thermofisher.com

ICC/IF (3) Flow (9) ELISA (1) ChIP (1) FN (1) Array (1)

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