

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

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Rat / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	eBioBV13 (BV13)
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_842767

Applications	Tested Dilution	Publications
Western Blot (WB)	Assay-Dependent	6 Publications
Immunohistochemistry (IHC)	-	10 Publications
Immunohistochemistry (Frozen) (IHC (F))	Assay-Dependent	2 Publications
Immunocytochemistry (ICC/IF)	-	10 Publications
Flow Cytometry (Flow)	1 µg/test	9 Publications
Immunoprecipitation (IP)	Assay-Dependent	-
ChIP assay (ChIP)	-	1 Publication
Functional Assay (FN)	Assay-Dependent	-
Peptide array (Array)	-	1 Publication
Inhibition Assays (IA)	-	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. (Please use Functional Grade purified eBioBV13 (BV13), Product # 16-1441 , in functional assays.).

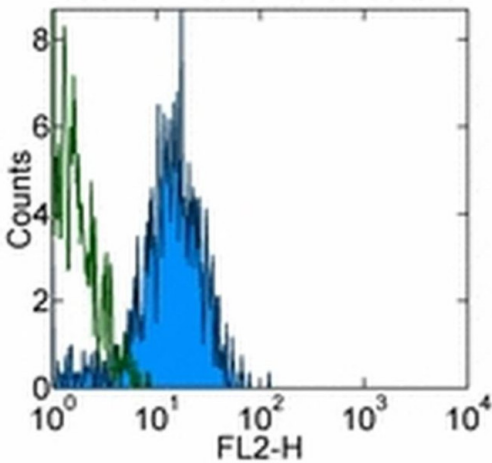
Applications Tested: This eBioBV13 (BV13) antibody has been tested by flow cytometric analysis of bEnd.3 cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined 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.

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

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

Filtration: 0.2 µm post-manufacturing filtered.

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



CD144 (VE-cadherin) Antibody (14-1441-82) in Flow
Staining of bEnd-3 cell line with 0.5 µg of Rat IgG1 K Isotype Control Purified (Product # 14-4301-82) (open histogram) or 0.5 µg of Anti-Mouse CD144 (VE-Cadherin) Purified (filled histogram) followed by F (ab')₂ Anti-Rat IgG PE (Product # 12-4822). Total viable cells were used for analysis.

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Western Blot (6)

Scientific reports	Year 2022
Robo4 is constitutively shed by ADAMs from endothelial cells and the shed Robo4 functions to inhibit Slit3-induced angiogenesis.	Species Mouse
"14-1441-82 was used in Western Blot to delineate ADAM10 and ADAM17 are Robo4 sheddases, and ectodomain shedding, including negative regulation by its ligand Slit3, represents a novel control mechanism of Robo4 signaling in angiogenesis."	
Authors: Xiao W,Pinilla-Baquero A,Faulkner J,Song X,Prabhakar P,Qiu H,Moremen KW,Ludwig A,Dempsey PJ,Azadi P,Wang L	
Aging cell	Year 2021
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 # 14-1441-82) 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	

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Immunohistochemistry (10)

JCI insight	Year 2022
Flow pattern-dependent mitochondrial dynamics regulates the metabolic profile and inflammatory state of endothelial cells.	
"Published figure using CD144 (VE-cadherin) monoclonal antibody (Product # 14-1441-82) 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	
Cell reports	Year 2022
Mfsd2b and Spns2 are essential for maintenance of blood vessels during development and in anaphylactic shock.	Species Mouse
"14-1441-82 was used in Immunohistochemistry to show that S1P export from Mfsd2b and Spns2 is essential for developing and mature vasculature."	
Authors: Le TNU,Nguyen TQ,Kalailingam P,Nguyen YTK,Sukumar VK,Tan CKH,Tukijan F,Couty L,Hasan Z,Del Gaudio I,Wenk MR,Cazenave-Gassiot A,Camerer E,Nguyen LN	

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More applications with references on thermofisher.com

- IHC (F) (2)
- ICC/IF (10)
- Flow (9)
- ChIP (1)
- Array (1)
- IA (1)

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