

CD144 (VE-cadherin) Monoclonal Antibody (16B1), eBioscience™

Product Details	
Size	100 µg
Species	Human
Published Species	Human
Expression System	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	16B1
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_467495

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	Assay-Dependent	10 Publications
Immunocytochemistry (ICC)	5 µg/mL	6 Publications
Immunofluorescence (IF)	5 µg/mL	10 Publications
Immunohistochemistry (IHC)	Assay-Dependent	5 Publications
Western Blot (WB)	Assay-Dependent	2 Publications
Neutralization (Neu)	-	1 Publication

Product Specific Information

Description: The 16B1 antibody reacts with human CD144, also known as VE-cadherin and cadherin-5. The cadherin family of receptors, which are calcium-dependent adhesion molecules, is known to be involved in homophilic cell interactions. VE-cadherin, which is 140 kDa, is localized at the intercellular boundaries of endothelial cells in blood and lymphatic vessels in several tissues. It is thought to play a role in vascular permeability and remodeling.

Applications Reported: This 16B1 antibody has been reported for use in flow cytometric analysis, immunoblotting (WB), microscopy, and immunocytochemistry without fixation.

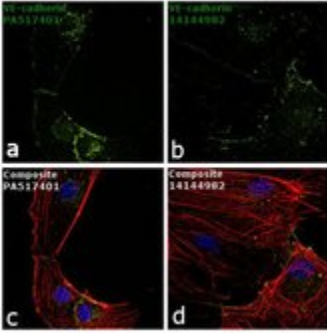
Applications Tested: This 16B1 antibody has been tested by immunoblotting Human Umbilical Vein Endothelial Cell (HUVEC) lysates. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

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

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

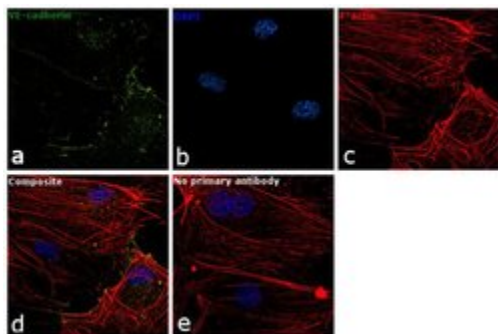
Filtration: 0.2 µm post-manufacturing filtered.

✓ Advanced Verification Data



CD144 (VE-cadherin) Antibody (14-1449-82)

Antibody specificity was demonstrated by showing that antibodies raised against the same target protein perform similarly. Immunofluorescence of VE-cadherin using CD144 (VE-cadherin) Monoclonal Antibody (16B1) (Product # 14-1449-82) performed along with another VE-cadherin Polyclonal Antibody (Product # PA5-17401) shows similar localization pattern in HUVEC cells. Independent antibody validation info.

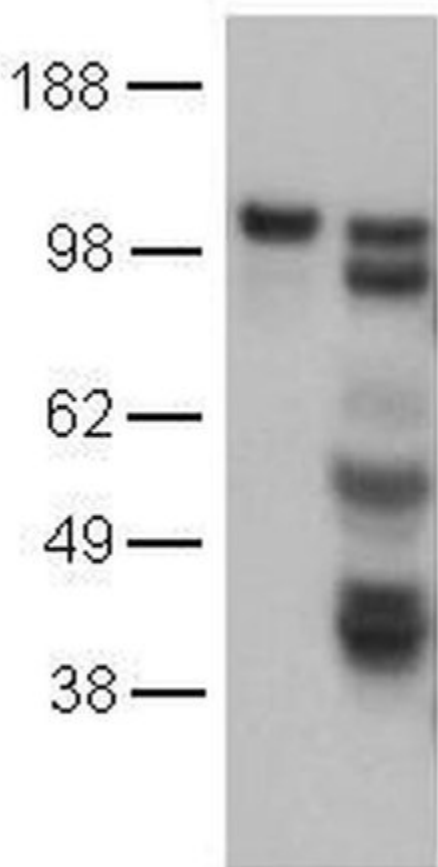


CD144 (VE-cadherin) Antibody (14-1449-82) in IF

Immunofluorescence analysis of VE-cadherin was performed using 70% confluent log phase HUVEC cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with CD144 (VE-cadherin) Monoclonal Antibody (16B1), eBioscience™ (Product # 14-1449-82) at 5 µg/mL in 0.1% BSA, incubated at 4 degree Celsius overnight and then labeled with Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Rhodamine Phalloidin (Product # R415, 1:300). Panel d represents the merged image showing plasma membrane localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

CD144 (VE-cadherin) Antibody (14-1449-82) in WB

EDTA-passaged (left) and Trypsin-passaged (right) Human Umbilical Vein Endothelial Cells (HUVEC) were resolved by SDS -PAGE and immunoblotted with 2 µg/mL of Anti-Human CD144 (VE-Cadherin) Purified and revealed with Anti-Rat IgG HRP.



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Flow Cytometry (10)

Stem cell reports

Targeted Disruption of TCF12 Reveals HEB as Essential in Human Mesodermal Specification and Hematopoiesis.

"Published figure using CD144 (VE-cadherin) monoclonal antibody (Product # 14-1449-82) in Flow Cytometry"
 Authors: Li Y,Brauer PM,Singh J,Xhiku S,Yoganathan K,Zúñiga-Pflücker JC,Anderson MK

Species
Human

Dilution
Not Cited

Year
2017

Stem cell research and therapy

ERK signaling is required for VEGF-A/VEGFR2-induced differentiation of porcine adipose-derived mesenchymal stem cells into endothelial cells.

"Published figure using CD144 (VE-cadherin) monoclonal antibody (Product # 14-1449-82) in Flow Cytometry"
 Authors: Almalki SG,Agrawal DK

Species
Human

Dilution
Not Cited

Year
2017

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

Immunocytochemistry (6)

PloS one

Challenges in enumeration of CTCs in breast cancer using techniques independent of cytokeratin expression.

Authors: Castle J,Morris K,Pritchard S,Kirwan CC

Species
Human
Not Applicable

Dilution
1:50
Not Cited

Year
2017

Nature communications

Vasculogenic mimicry in small cell lung cancer.

"14144982 was used in immunocytochemistry to discuss the relevance of vasculogenic mimicry in small cell lung cancer"

Authors: Williamson SC, Metcalf RL, Trapani F, Mohan S, Antonello J, Abbott B, Leong HS, Chester CP, Simms N, Polanski R, Nonaka D, Priest L, Fusi A, Carlsson F, Carlsson A, Hendrix MJ, Seftor RE, Seftor EA, Rothwell DG, Hughes A, Hicks J, Miller C, Kuhn P, Brady G, Simpson KL, Blackhall FH, Dive C

Species
Human
Not Applicable

Dilution
Not Cited
Not Cited

Year
2016

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

More applications with references on thermofisher.com

IF (10) **IHC (5)** **WB (2)** **Neu (1)**

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