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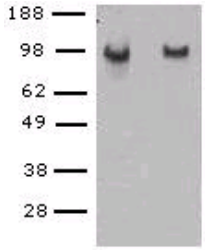
# Anti-Mouse CD144 (VE-Cadherin) Purified

Catalog Number: 14-1442
Also Known As:VECadherin, Cadherin 5, Cadherin5
RUO: For Research Use Only




Non-reduced (left) and reduced (right) bEnd.3 cell line lysates were loaded at 1x$10^5$ cells/lane, probed with 2 µg/mL of Anti-Mouse CD144 (VE-Cadherin) Purified and revealed with Anti-Rat IgG HRP.

## Product Information

Contents: Anti-Mouse CD144 (VE-Cadherin) Purified
REF Catalog Number: 14-1442
Clone: eBioBV14 (BV14)
Concentration: 0.5 mg/ml
Host/Isotype: Rat IgG2b

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C.
LOT Batch Code: Refer to Vial
Use By: Refer to Vial
Caution, contains Azide

## Description

The BV14 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. Cross-blocking experiments suggest that BV14 recognizes a different epitope than another mouse VE-Cadherin monoclonal antibody, BV13.

## Applications Reported

This eBioBV14 (BV14) antibody has been reported for use in immunoprecipitation, immunoblotting (WB), and immunohistology staining of frozen tissue sections. Intravenous injection of BV14 has been shown to induce a concentration- and time-dependent increase in vascular permeability in the heart and lungs, however BV13 was show to be more potent in this activity. (Please use Functional Grade purified eBioBV14 (BV14), cat. 16-1442, in functional assays.)

## Applications Tested

This eBioBV14 (BV14) antibody has been tested by western blot analysis of bEnd.3 cell lysates, and can be used in western blotting at a starting concentration of 2 µg/ml.

## References

Corada M, Mariotti M, Thurston G, Smith K, Kunkel R, Brockhaus M, Lampugnani MG, Martin-Padura I, Stoppacciaro A, Ruco L, McDonald DM, Ward PA, Dejana E. Vascular endothelial-cadherin is an important determinant of microvascular integrity in vivo. Proc Natl Acad Sci U S A. 1999 Aug 17;96(17):9815-20. (BV14, FA, IHC, PubMed)

Liao F, Li Y, O'Connor W, Zanetta L, Bassi R, Santiago A, Overholser J, Hooper A, Mignatti P, Dejana E, Hicklin DJ, Bohlen P. Monoclonal antibody to vascular endothelial-cadherin is a potent inhibitor of angiogenesis, tumor growth, and metastasis. Cancer Res. 2000 Dec 15;60(24):6805-10.

Crosby CV, Fleming PA, Argraves WS, Corada M, Zanetta L, Dejana E, Drake CJ. VE-cadherin is not required for the formation of nascent blood vessels but acts to prevent their disassembly. Blood. 2005 Apr 1;105(7):2771-6. Epub 2004 Dec 16.

## Related Products

11-4317 Streptavidin FITC
11-4811 Anti-Rat IgG FITC

12-4317 Streptavidin PE
13-4813 Anti-Rat IgG Biotin (Polyclonal)
14-1441 Anti-Mouse CD144 (VE-Cadherin) Purified (eBioBV13 (BV13))
14-1449 Anti-Human CD144 (VE-Cadherin) Purified (16B1)
14-4031 Rat IgG2b K Isotype Control Purified
17-4317 Streptavidin APC

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