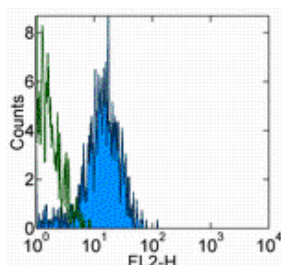


Anti-Mouse CD144 (VE-Cadherin) Purified

Catalog Number: 14-1441

Also Known As: Cdh5, Cadherin-5, Vascular endothelial cadherin

RUO: For Research Use Only



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

Product Information

Contents: Anti-Mouse CD144 (VE-Cadherin) Purified

REF **Catalog Number:** 14-1441

Clone: eBioBV13 (BV13)

Concentration: 0.5 mg/mL

Host/Isotype: Rat IgG1

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



Temperature Limitation: Store at 2-8°C.



Batch Code: Refer to Vial



Use By: Refer to Vial



Caution, contains Azide

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), cat. 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.

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. (**BV13**, 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. (**BV13**, FA, PubMed)

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. (**BV13**, FA, PubMed)

Related Products

11-4811 Anti-Rat IgG FITC
12-4822 F(ab')₂ Anti-Rat IgG PE (polyclonal)
14-1449 Anti-Human CD144 (VE-Cadherin) Purified (16B1)
14-4301 Rat IgG1 K Isotype Control Purified

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Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com