

Purified anti-human CD144 (VE-Cadherin)

Catalog # / Size: 348501 / 25 µg
348502 / 100 µg

Clone: BV9

Isotype: Mouse IgG2a, κ

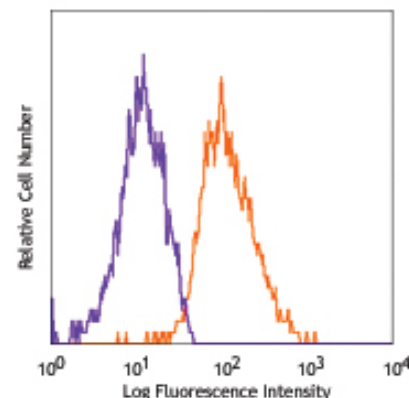
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C.



Human umbilical vein endothelial cells, HUVEC, stained with purified BV9 conjugated with PE

Applications:

Applications: FC - *Quality tested*
WB, IF, IP - *Reported in the literature*

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for the relevant formats) include: Western Blot^{1,2}, immunofluorescence microscopy^{1,3}, immunoprecipitation^{1,4}, block angiogenesis in vitro^{4,5}, inhibit VE-cadherin reorganization⁴, and induce endothelial cell apoptosis⁴.

Application References:

1. Almagro S, *et al.* 2010. *Mol. Cell Biol.* 30:1703. (WB IF IP)
2. Zhang F, *et al.* 2004. *J. Biol. Chem.* 279:11760. (WB)
3. Iurlaro M, *et al.* 2004. *Am. J. Pathol.* 165:181. (IF)
4. Corada M, *et al.* 2001. *Blood* 97:1679. (IP Block)
5. Kooistra M, *et al.* 2005. *FEBS* 579:4966. (Block)

Description: CD144, also known as VE-cadherin and cadherin-5, is a 140 kD glycoprotein which is composed of 5 extracellular cadherin repeats and a highly conserved cytoplasmic tail region. It is a calcium-dependent transmembrane cell-cell adhesion molecule localized at the intercellular boundaries of endothelial cells, hematopoietic stem cells, and perineurial cells. It functions as a classic cadherin by mediating homophilic adhesion and functions as a plasma membrane attachment site for the cytoskeleton. CD144 is thought to play a role in vascular development, permeability, and remodeling.

Antigen References:

1. Taddei A, *et al.* 2008. *Nat. Cell Biol.* 10:923.
2. Gavard J, *et al.* 2006. *Nat. Cell Biol.* 8:1223.
3. Kim I, *et al.* 2005. *Blood* 106:903.
4. Suzuki S, *et al.* 1991. *Cell Regul.* 2:261.

Related Products:

Product	Clone	Application
Purified Mouse IgG2a, κ Isotype Ctrl	MOPC-173	FC, ICC, IF, IHC, IP, WB
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC



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