



11-770-C025

## Monoclonal Antibody to CD144 Purified Antibody (0.025 mg)

<b>Clone:</b>	55-7H1
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	The mouse monoclonal antibody 55-7H1 recognizes a calcium-independent epitope on CD144 (VE-cadherin, cadherin 5), an adhesion molecule expressed on endothelial cells.
<b>Regulatory Status:</b>	RUO
<b>Immunogen:</b>	Human endothelial cells
<b>Species Reactivity:</b>	Human
<b>Application:</b>	Flow Cytometry Immunoprecipitation Western Blotting Immunohistochemistry (frozen sections) Immunocytochemistry
<b>Purity:</b>	> 95% (by SDS-PAGE)
<b>Purification:</b>	Purified by protein-A affinity chromatography
<b>Concentration:</b>	1 mg/ml
<b>Storage Buffer:</b>	Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4
<b>Storage / Stability:</b>	Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial label.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	CD144 / VE-cadherin (cadherin 5) is the major cadherin that is present at endothelial junctions. It is also strictly endothelial specific. Under vascular permeability increasing conditions (and also in capillaries and veins) CD144 is being phosphorylated, which promotes its rapid and reversible internalization. On the contrary, binding of p120 catenin (delta1 catenin) maintains CD144 localization at the plasma membrane, which stabilizes the junction and reduces vascular permeability.

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**Antibodies**

- References:**
- \*Dejana E, Orsenigo F: Endothelial adherens junctions at a glance. *J Cell Sci.* 2013 Jun 15;126(Pt 12):2545-9.
  - \*Limaye V, Li X, Hahn C, Xia P, Berndt MC, Vadas MA, Gamble JR: Sphingosine kinase-1 enhances endothelial cell survival through a PECAM-1-dependent activation of PI-3K/Akt and regulation of Bcl-2 family members. *Blood.* 2005 Apr 15;105(8):3169-77
  - \*Hamilton RD, Foss AJ, Leach L: Establishment of a human in vitro model of the outer blood-retinal barrier. *J Anat.* 2007 Dec;211(6):707-16
  - \*De Ugarte DA, Alfonso Z, Zuk PA, Elbarbary A, Zhu M, Ashjian P, Benhaim P, Hedrick MH, Fraser JK: Differential expression of stem cell mobilization-associated molecules on multi-lineage cells from adipose tissue and bone marrow. *Immunol Lett.* 2003 Oct 31;89(2-3):267-70.
  - \*Agrawal V, Kelly J, Tottey S, Daly KA, Johnson SA, Siu BF, Reing J, Badyrak SF: An isolated cryptic peptide influences osteogenesis and bone remodeling in an adult mammalian model of digit amputation. *Tissue Eng Part A.* 2011 Dec;17(23-24):3033-44.
  - \*Tisato V, Zauli G, Voltan R, Giancesini S, di Iasio MG, Volpi I, Fiorentini G, Zamboni P, Secchiero P: Endothelial cells obtained from patients affected by chronic venous disease exhibit a pro-inflammatory phenotype. *PLoS One.* 2012;7(6):e39543.

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