

11-770-C100

Monoclonal Antibody to CD144 Purified Antibody (0.1 mg)

Clone: 55-7H1

Isotype: Mouse IgG1

Specificity: The mouse monoclonal antibody 55-7H1 recognizes a calcium-independent

epitope on CD144 (VE-cadherin, cadherin 5), an adhesion molecule expressed on

endothelial cells.

Regulatory Status: RUO

Immunogen: Human endothelial cells

Species Reactivity: Human

Application: Flow Cytometry

Immunoprecipitation Western Blotting

Immunohistochemistry (frozen sections)

Immunocytochemistry

Purity: > 95% (by SDS-PAGE)

Purification: Purified by protein-A affinity chromatography

Concentration: 1 mg/ml

Storage Buffer: Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial

label.

Expiration: See vial label

Lot Number: See vial label

Background: 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.



PRODUCT DATA SHEET

References:

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*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.

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*Tisato V, Zauli G, Voltan R, Gianesini 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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