



RECA-1 (HIS52): sc-57996

BACKGROUND

The endothelium represents the layer of thin specialized epithelium made up of a simple squamous layer of cells that line the interior surface of blood vessels to form an interface between circulating blood in the lumen and the rest of the vessel wall. Endothelial cells line the entire circulatory system and are involved in many aspects of vascular biology, including blood clotting, inflammation, swelling, vasoconstriction, vasodilation and atherosclerosis. Endothelial cells also control the passage of materials and the transit of white blood cells into and out of the bloodstream. In some organs, endothelial cells are highly differentiated to perform more specialized filtering functions. Examples of such unique endothelial structures include the renal glomerulus and the blood-brain barrier. RECA-1, also designated rat endothelial cell antigen-1, is a cell surface antigen which is expressed by all rat endothelial cells.

REFERENCES

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3. Takahashi, H., et al. 1992. Circulating thrombomodulin as a novel endothelial cell marker: comparison of its behavior with von Willebrand factor and tissue-type plasminogen activator. *Am. J. Hematol.* 41: 32-39.
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5. Hosoya, K., et al. 2001. Conditionally immortalized retinal capillary endothelial cell lines (TR-iBRB) expressing differentiated endothelial cell functions derived from a transgenic rat. *Exp. Eye Res.* 72: 163-172.
6. Xu, H., et al. 2004. Expression of a lymphatic endothelial cell marker in benign and malignant vascular tumors. *Hum. Pathol.* 35: 857-861.
7. Niemelä, H., et al. 2005. Molecular identification of PAL-E, a widely used endothelial cell marker. *Blood* 106: 3405-3409.
8. Nishiyama, K., et al. 2005. Id1 gene transfer confers angiogenic property on fully differentiated endothelial cells and contributes to therapeutic angiogenesis. *Circulation* 112: 2840-2850.
9. Wassmann, S., et al. 2006. Improvement of endothelial function by systemic transfusion of vascular progenitor cells. *Circ. Res.* 99: 74-83.

SOURCE

RECA-1 (HIS52) is a mouse monoclonal antibody raised against stromal cells of rat origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

RECA-1 (HIS52) is recommended for detection of RECA-1 of mouse and rat origin by immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
 1) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.