

ESM1

Rabbit Anti-Human Endothelial Cell-Specific Molecule 1 pAb

Catalog No.	CS415A	Quantity:	100 µg
	CS415B		200 µg

Alternate Names: Endothelial cell-specific molecule-1, endocan

Description: Endocan, also known as endothelial cell-specific molecule1 (ESM1), is a secreted cysteine-rich dermatan sulfate (DS) proteoglycan primarily expressed by endothelial cells within the vascular capillary network in kidney and in the alveolar walls of the lung. Endocan expression has also been detected in different epithelia and in adipocytes. The expression of endocan is up-regulated by TNF α , IL1 β or lipopolysaccharide and down-regulated by IFN γ . The mouse Endocan gene encodes a 184 amino acid (aa) residues precursor protein with a 19 aa hydrophobic signal peptide and a 165 aa mature region with 18 Cysteine residues. The DS chain is covalently attached to serine 137. Endocan has been shown to bind CD11a/CD18 integrin (also known as lymphocyte function-associated antigen1, LFA1) on human lymphocytes, monocytes and Jurkat cells, inhibiting its binding to ICAM1 and reducing LFA1mediated leukocyte activation. Endocan binds via its DS chain to hepatocyte growth factor (HGF) to enhance HGF mitogenic activity. Genetically engineered cells overexpressing Endocan has been shown to induce tumor formation, suggesting that Endocan may be involved in the pathophysiology of tumor growth *in vivo*. Circulating Endocan can be detected in the serum from healthy subjects.

Rabbit anti-Human Endocan polyclonal antibody is produced from sera of rabbits pre-immunized with highly pure (>95%) recombinant human Endocan/ESM1 (Trp19-Arg184) derived from *E. coli*.

Gene ID: 11082

Protein Accession No.: NP_008967.1

Host: Rabbit

Immunogen: Recombinant human ESM-1

Isotype: IgG

Formulation: Lyophilized from a solution of 5 mM PBS, pH 7.2

Purification: Protein A purified

Reconstitution: **Centrifuge vial prior to opening.** Reconstitute in sterile water to a concentration of 0.1 -1.0 mg/ml.

Applications: Western Blot: use at 1-5 µg/ml
Immunohistochemistry/Immunofluorescence: use at 1:200
The optimal concentration should be determined by the user for each specific application.

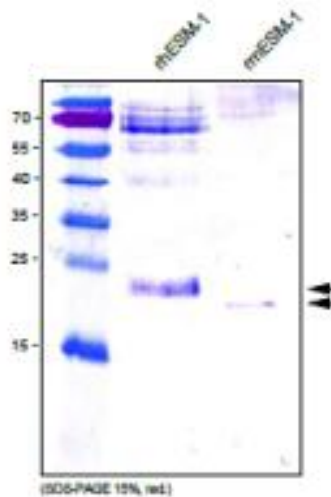


Storage & Stability:

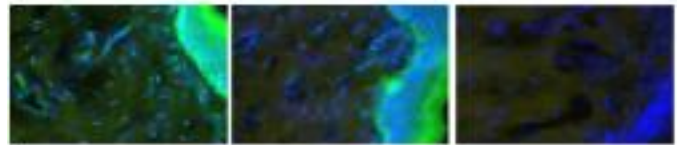
The lyophilized antibody is stable at room temperature for up to 1 month, but best stored below 4°C. After reconstitution, the antibody is stable for at least two weeks at 2-4°C. Frozen aliquots are stable for at least 6 months when stored at -20°C to -80°C. **Avoid repeated freeze-thaw cycles.**

Western Analysis of anti-human Endocan/ESM-1.
Samples were loaded in 15% SDS-polyacrylamide gel under reducing conditions.

Lane 1: MW markers (kDa).
Lane 2: recombinant human ESM-1.
Lane 3: recombinant mouse ESM-1.



Immunofluorescence staining of cryo-sections of unfixed human foreskin with anti-human Endocan/EMS1 (dilution 1:100) and counter staining of nuclei with Dapi. Note the specific green Endocan/ESM-1 signal in epidermis, connective tissue cells and vessels.



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