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Esm1
Recombinant Mouse Endothelial Cell-Specific Molecule 1, His-Tag

Catalog No.	CS422	**Quantity:**	50 µg

Alternate Names: ESM-1, endocan

Description: Endothelial cell-specific molecule1 (ESM-1), 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. ESM-1 expression has also been detected in different epithelia and in adipocytes. The expression of ESM-1 is up-regulated by TNFα, IL1β or lipopolysaccharide and down-regulated by IFNγ. The human ESM-1 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. ESM-1 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 ESM-1 have been shown to induce tumor formation, suggesting that ESM- may be involved in the pathophysiology of tumor growth *in vivo*.

Concentration: Q9QYY7

Gene ID: 71690

Source: Insect Cells

Molecular Weight: 19.07 kDa (173 aa)

Formulation: Lyophilized with no additives

Purity: >95% by SDS-PAGE, visualized by silver stain

Amino Acid Sequence: WSAKYAVDCP EHCDKTECRS SLRCKRTVLD DCGCCQVCAA GPGETCYRTV SGMDGVKCGP GLKCHFYSEE DDFGDEFGIC KDCPYGTFGM ECKETCNCQS GICDRVTGRC LDFPFFQYAA AKSPSRTSAS HTERDSASGD GNAVREEIGE GNAARPSVMK WLNPRTRHHH HHH

Reconstitution: **Centrifuge vial prior to opening.** Add sterile water to the vial to a concentration of 0.1 - 1.0 mg/mL. **Do not vortex.** After complete solubilization of the protein, it may be further diluted with other solutions containing a carrier protein such as 0.1 % BSA.

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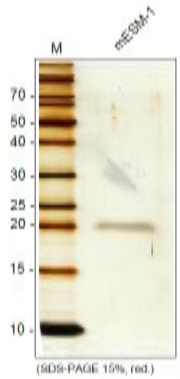
Storage & Stability: The lyophilized protein is stable at -20°C to -80° for up to 1 year. Reconstituted working aliquots are stable for 1 week at 2-8°C and for 3 months at -20°C to -80°C.
Avoid repeated freeze/thaw cycles.

SDS-PAGE analysis of recombinant mouse Endocan/ESM1 derived from insect cells. Sample was loaded in 15% SDS-polyacrylamide gel under reducing conditions and stained with Silver stain.



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