

Datasheet for ABIN1589766 ESM1 Protein (His tag)



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Overview

Quantity:	50 µg
Target:	ESM1
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This ESM1 protein is labelled with His tag.

Product Details

Sequence:	WSNNYAVDCP QHCDSSECKS SPRCKRTVLD DCGCCRVCAA GRGETCYRTV SGMDGMKCGP GLRCQPSNGE DPFGEFEGIC KDCPYGTFGM DCRETNCNQS GICDRGTGKC LKFPFFQYSV TKSSNRFVSL TEHDMASGDG NIVREEVVKE NAAGSPVMRK WLNPRTRHHH HHH
Characteristics:	Length (AA): 173 Chromosomal location: 5q11.2
Purity:	> 95 % by SDS-PAGE. Visualized by silver staining

Target Details

Target:	ESM1
Alternative Name:	Endocan/ESM-1 (ESM1 Products)
Background:	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

Target Details

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 human 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. In patients with lung cancer or acute and severe sepsis, elevated Endocan concentrations have been reported.

Synonyms: ENDOCAN, ESM1, endothelial cell-specific molecule 1

Molecular Weight:	19.2 kDa
NCBI Accession:	NP_008967 , NM_007036
UniProt:	Q9NQ30
Pathways:	Growth Factor Binding

Application Details

Application Notes:	Not tested so far.
Comment:	Cytokines & Growth Factors
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Human ESM-1/Endocan should be reconstituted in 50 mM acetic acid or water to a concentration of 0.1 mg/mL. This solution can be diluted in water or other buffer solutions or stored at -20 °C.
Buffer:	300 mM NaCl, 50 mM NaP, pH 8.0
Storage:	0 °C

Handling

Storage Comment: The lyophilized human ESM-1/Endocan, though stable at room temperature, is best stored desiccated below 0 °C.