

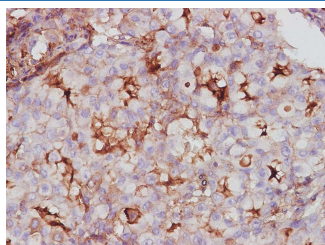
## ESM1 Polyclonal Antibody

catalog number: AN006090L

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Reactivity	Human
Immunogen	Recombinant Mouse ESM1 protein expressed by Mammalian
Host	Rabbit
Isotype	IgG
Purification	Antigen Affinity Purification
Conjugation	Unconjugated
Buffer	PBS with 0.05% proclin 300, 1% protective protein and 50% glycerol,pH7.4
Applications	Recommended Dilution
IHC	1:500-1:1000

### Data



Immunohistochemistry of paraffin-embedded Human lung cancer using ESM1 Polyclonal Antibody at dilution of 1:1200.

Preparation & Storage	
Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the temperature recommended.

### Background

Endocan, also known as endothelial-cell specific molecule-1 (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. Endocan expression has also been detected in different epithelia and in adipocytes. The expression of endocan is upregulated by TNF- alpha, IL-1 beta, or lipopolysaccharide and down-regulated by IFN- gamma. 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 antigen-1, LFA-1) on human lymphocytes, monocytes and Jurkat cells, inhibiting its binding to ICAM-1 and reducing LFA-1-mediated 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.

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