



Datasheet for ABIN6239900

**ESM1 Protein (AA 20-184) (His tag)**[Go to Product page](#)

## 1 Image

## Overview

Quantity:	50 µg
Target:	ESM1
Protein Characteristics:	AA 20-184
Origin:	Human
Source:	Escherichia coli (E. coli)
Biological Activity:	Active
Purification tag / Conjugate:	This ESM1 protein is labelled with His tag.
Application:	Activity Assay (AcA), Cell Culture (CC)

## Product Details

Characteristics:	Tag location: N-terminal His Tag
Purity:	> 90 %
Biological Activity Comment:	Endothelial cell-specific molecule 1 (ESM1) is a proteoglycan secreted by endothelial cells (primarily in the human lung and kidney tissues) and its mRNA expression is regulated by inflammatory cytokines. Endocan expression, which detected in various epithelia and adipocytes has been shown to be upregulated by vascular endothelial growth factor (VEGF), fibroblast growth factor 2 (FGF-2), TNF alpha, IL1 beta, or lipopolysaccharide and downregulated by IFN gamma. Genetically engineered cells overexpressing ESM1 induce tumor formation, implying that ESM1 might be involved in the pathophysiology of tumor growth in vivo. Besides, Lymphocyte Function Associated Antigen 1 Alpha (LFA1a) has been identified as an interactor of ESM1, thus a binding ELISA assay was conducted to detect the interaction of recombinant human ESM1 and recombinant human LFA1a. Briefly, ESM1 were diluted serially

## Product Details

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in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to LFA1a-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti- ESM1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50µL stop solution to the wells and read at 450nm immediately. The binding activity of of ESM1 and LFA1a was shown in Figure 1, and this effect was in a dose dependent manner The binding activity of ESM1 with LFA1a.

## Target Details

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Target:	ESM1
Alternative Name:	Endothelial Cell Specific Molecule 1 (ESM1) ( <a href="#">ESM1 Products</a> )
Background:	Alternative Names: Endocan
Molecular Weight:	19kDa
UniProt:	<a href="#">Q9NQ30</a>
Pathways:	<a href="#">Growth Factor Binding</a>

## Application Details

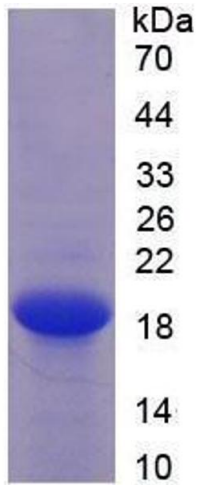
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Application Notes:	Isoelectric Point: 6.7
Restrictions:	For Research Use only

## Handling

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Format:	Lyophilized
Buffer:	20 mM Tris, 150 mM NaCl, pH 8.0, containing 1 mM EDTA, 1 mM DTT, 0.01 % SKL, 5 % Trehalose and Proclin300.
Preservative:	Dithiothreitol (DTT), Other preservative, ProClin
Precaution of Use:	This product contains ProClin and Dithiothreitol (DTT): POISONOUS AND HAZARDOUS SUBSTANCES which should be handled by trained staff only.



**Image 1.**