

Recombinant human Endocan/ESM1 protein

Catalog Number: ATGP3827

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

20-184aa

UniProt No.

Q9NQ30

NCBI Accession No.

NP_008967

Alternative Names

Endocan, Endothelial cell-specific molecule 1, Endothelial cell-specific molecule 1 isoform a, ESM1

PRODUCT SPECIFICATION

Molecular Weight

19.2 kDa (174aa)

Concentration

0.25mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

ESM1, also known as endothelial cell-specific molecule 1 isoform a, is a secreted cysteine-rich dermatan sulfate proteoglycan. This protein primarily expressed by endothelial cells within the vascular capillary network in the alveolar walls of the lung and also at lower level in kidney. The expression of it is upregulated by TNF-alpha, IL-beta or lipopolysaccharide and down-regulated by IFN-gamma. It plays roles on angiogenesis, sprouting, and

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may have potent implications in lung endothelial cell-leukocyte interaction. Also, this protein has dermatan sulfate (DS) that is covalently attached to serine 137. It binds using DS chain to hepatocyte growth factor (HGF) to enhance HGF mitogenic activity. Genetically engineered cells overexpressing ESM1 has been shown to induce tumor formation, suggesting that it may be involved in the pathophysiology of tumor growth in vivo. Recombinant human ESM1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

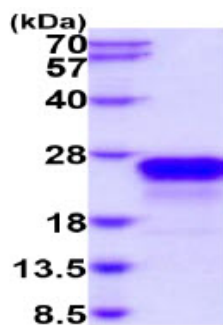
ADLWSNNYAV DCPQHCDSS CKSSPRCKRT VLDDCGCCRV CAAGRGETCY RTVSGMDGMK CGPGLRCQPS
NGEDPFGEEF GICKDCPYGT FGMDCRETCN CQSGICDRGT GKCLKFPPFQ YSVTKSSNRF VSLTEHDMAS GDGNIVREEV
VKENAAGSPV MRKWLNPRHH HHHH

General References

Bechard D., et al, (2001) J. Biol. Chem. 276:48341-48349.
Scherpereel A., et al. (2003) Cancer Res. 63:6084

DATA

SDS-PAGE



15% SDS-PAGE (3ug)

3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.