

## Recombinant Mouse ESM1/Endocan Protein (Human Cells, His Tag)

Catalog Number: PKSM041193

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

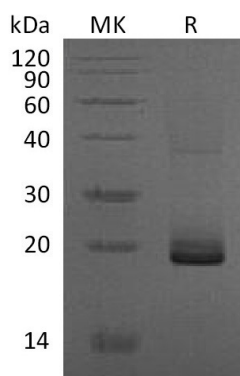
### Description

<b>Species</b>	Mouse
<b>Source</b>	HEK293 Cells-derived Mouse ESM1/Endocan protein Trp20-Arg184, with an C-terminal His
<b>Calculated MW</b>	19.0 kDa
<b>Observed MW</b>	20 kDa
<b>Accession</b>	Q9QYY7
<b>Bio-activity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.
<b>Reconstitution</b>	Please refer to the specific buffer information in the printed manual. Please refer to the printed manual for detailed information.

### Data



### Background

Endothelial cell-specific molecule-1 (ESM-1)—so-called endocan—is a novel endothelium derived soluble dermatan sulfate proteoglycan (PG) that is constitutively expressed by endothelial cells in lungs and kidneys and can be detected in human blood. It is encoded by the ESM1 gene. The expression of this gene is regulated by several cytokines and growth factors, such as vascular endothelial growth factor. Inflammatory cytokines, such as interleukin (IL)-1 $\beta$  and tumor necrosis factor (TNF)- $\alpha$ , stimulate the upregulation of endocan mRNA and the secretion of endocan from endothelial cells. The binding of circulating endocan to leukocyte ligand for ICAM-1—Lymphocyte Function-associated Antigen-1 (LFA-1) and to leukocyte ligand for VCAM-1—Very Late Antigen-4 (VLA-4) is important in leukocyte adhesion and interaction with activated endothelium. Endocan is a key player in the regulation of major processes such as cell adhesion in inflammatory disorders and tumor progression.