

Recombinant Mouse Endothelial cell-specific molecule 1 Protein

Cat.NO.: TP04844

3th Edition

Synonyms:Endothelial cell-specific molecule 1; ESM-1; Esm1; Endocan

Description: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 β and tumor necrosis factor (TNF)- α , 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.

Form:PBS

Molecular Weight:19.0 kDa

Sequences:Met1-Arg184

Purity:> 95% by HPLC

Concentration:

Endotoxin Level:<1.0 EU per 1 μ g of protein (determined by LAL method)

Storage:Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.