



11 Park Drive, Suite 12
Boston, MA 02215

Rabbit Anti-Mouse Endocan/ESM-1

ORDERING INFORMATION

Catalog Number:	103-PA44
Size:	100 µg
Formulation:	Polyclonal Antibody ; Lyophilized
Synonyms:	ESM1; AV004503; 0610042H23Rik
Antigen:	Recombinant human ESM-1 (RT #300-062)
Application:	WB
NCBI Gene ID:	11082
Buffer:	PBS pH 7.4 w/o preservative

Description:

Endocan (endothelial cell proteoglycan), also known as endothelial cell specific molecule 1 (ESM-1), is a 50 kDa monomeric, secreted, cysteine-rich proteoglycan identified initially in endothelial cells of the kidney and lung. Mouse Endocan is synthesized as a 184 amino acid (aa) precursor that contains a 21 aa signal sequence and a 20 kDa, 163 aa mature region. The N-terminal 2/3 of the molecule contains 18 cysteine residues and there are no potential N-linked glycosylation sites. Based on human Endocan, there are at least two potential O-linked glycosylation sites, one of which will likely be utilized on Ser at position # 136 of the mature molecule. The posttranslational modification is approximately 30 kDa in size. It consists of a single dermatan sulfate chain that contains 4 O-sulfated N-acetyl galactosamine with α-D-glucuronic acid. This chain is suggested to bind HGF and contribute to HGF mitogenic activity. Mature mouse Endocan shares 96% and 74% aa identity with rat and human Endocan, respectively. In human, there is a potential for an alternate splice variant. It shows a deletion of aa 82-131, a range which would not remove the dermatan sulfate attachment site. It is not known if such a splice form exists in mouse. Endocan is expressed by endothelial cells, adipocytes, bronchial epithelium and distal renal tubular epithelium. It is upregulated by TNFα and VEGF, and is known to bind to LFA1 (integrin αLβ2) on the surface of PBMCs, blocking LFA1 interaction with ICAM1. Normal circulating levels of Endocan are approximately 1 ng/mL.

Reconstitution:

Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/ml.

Stability:

The lyophilized antibody is stable at room temperature for up to 1 month. The reconstituted antibody is stable for at least two weeks at 2-8 °C. Frozen aliquots are stable for at least 6 months when stored at -20 °C. **Avoid repeated freeze-thaw cycles!**

Optimal dilutions should be determined by each laboratory for each application.

The listed dilutions are for recommendation only and the final conditions should be optimized by the end users!

This product is sold for Research Use Only !

Contact & Ordering Information: Angio-Proteomie, 11 Park Drive, Suite 12, Boston, MA 02215, USA. Tel: 617-549-2665; Fax: (480) 247-4337, angioproteomie@gmail.com