

Datasheet for ABIN1589869

anti-ESM1 antibody



Overview

Quantity:	100 μg
Target:	ESM1
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ESM1 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	Endocan/ESM-1 antibody
Immunogen:	Recombinant mouse ESM-1 (ABIN1589771)
Isotype:	IgG
Specificity:	Recombinant mouse ESM-1
Characteristics:	Chromosomal location: 13 D2.2, 13
Purification:	Protein A purified

Target Details

Target:	ESM1
Alternative Name:	Endocan/ESM-1 (ESM1 Products)
Background:	Esm1, ESM-1, AV004503, 0610042H23Rik,Endocan (endothelial cell proteoglycan), also known

as endothelialcell specific molecule1 (ESM-1), is a 50 kDa monomeric, secreted, cysteinerich 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 40 sulfated N-acetyl galactosamine with aiduronate. 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 TNFa 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.

Gene ID:	71690
NCBI Accession:	NM_023612, NP_076101
UniProt:	Q9QYY7
Pathways:	Growth Factor Binding

Application Details

Application Notes:	Western Blot: use at 1-5 μg/mL.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Centrifuge vial prior to opening. Reconstitute in sterile water to a concentration of 0.1-1.0 mg/mL.
Buffer:	PBS
Handling Advice:	Centrifuge vial prior to opening.

Handling

Storage:	4 °C,-20 °C
Storage Comment:	The lyophilized antibody is stable for at least 2 years at -20°C. After sterile reconstitution the antibody is stable at 2-8°C for up to 6 months. Frozen aliquots are stable for at least 6 months when stored at -20°C. Addition of a carrier protein or 50% glycerol is recommended for frozen aliquots.
Expiry Date:	24 months