ESM1 Recombinant antibody

Catalog Number:86027-1-RR

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Basic Information

Catalog Number:
86027-1-RR

Concentration:
1000 μg/ml

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG3019

GenBank Accession Number:
BC011989

GeneID (NCBI):
11082

UNIPROT ID:
Q9NQ30

Full Name:
endothelial cell-specific molecule 1

Calculated MW:
184 aa, 20 kDa

Observed MW:
14 kDa

Purification Method:
Protein A purification

CloneNo.:
250287H3

Recommended Dilutions:
WB: 1:1000-1:6000

Applications

Tested Applications:
WB, ELISA

Species Specificity:
human, mouse, rat

Positive Controls:

WB : HUVEC cells, PC-3 cells, DU 145 cells, A2780 cells, SKOV-3 cells, mouse brain tissue, rat brain tissue

Background Information

ESM1, also known as endocan or endothelial cell-specific molecule 1, is a protein-coding gene that encodes a secreted proteoglycan primarily expressed in endothelial cells of human tissues, including lung, kidney, and vascular systems. The protein consists of a 20 kDa core protein with a dermatan sulfate chain, forming a 50 kDa mature proteoglycan. ESM1 plays a crucial role in endothelial cell proliferation, migration, and angiogenesis (blood vessel formation). It modulates vascular development and maintains endothelial homeostasis. Overexpression of ESM1 is observed in cancers such as gastric, cervical, and lung tumors, where it promotes angiogenesis and tumor progression via pathways like VEGF/ERK signaling. Elevated serum ESM1 levels are associated with poor clinical outcomes in cancer patients.

Storage

Storage:
Store at -20℃. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

Selected Validation Data
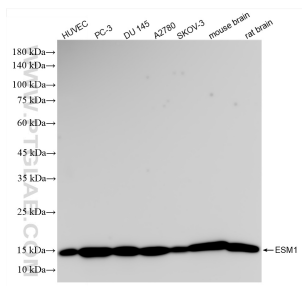
Various lysates were subjected to SDS PAGE followed by western blot with 86027-1-RR (ESM1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.