

ESAM (P-18): sc-83144

BACKGROUND

As a member of the immunoglobulin superfamily, ESAM (Endothelial cell-selective adhesion molecule) is a 390 amino acid junctional-type cellular adhesion protein that mediates homophilic reactions between endothelial cells. ESAM regulates endothelial permeability and angiogenesis and also participates in migration of neutrophils through the vessel wall by influencing endothelial cell contacts. After platelet activation, ESAM localizes to platelets in order to limit thrombus growth and stability, thereby optimizing the hemostatic response following vascular injury. This evidence suggests that ESAM may function as a mediator of atherosclerosis. Also, there is potential for ESAM to play a role in the regulation of tumor metastasis by promoting endothelial cell migration and tube formation in metastatic nodules.

REFERENCES

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3. Mikkola, H. 2009. ESAM: adding to the hematopoietic toolbox. *Blood* 113: 2871-2872.
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CHROMOSOMAL LOCATION

Genetic locus: ESAM (human) mapping to 11q24.2; Esam (mouse) mapping to 9 A4.

SOURCE

ESAM (P-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a cytoplasmic domain of ESAM of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-83144 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

ESAM (P-18) is recommended for detection of ESAM of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ESAM (P-18) is also recommended for detection of ESAM in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ESAM siRNA (h): sc-77286, ESAM siRNA (m): sc-77287, ESAM shRNA Plasmid (h): sc-77286-SH, ESAM shRNA Plasmid (m): sc-77287-SH, ESAM shRNA (h) Lentiviral Particles: sc-77286-V and ESAM shRNA (m) Lentiviral Particles: sc-77287-V.

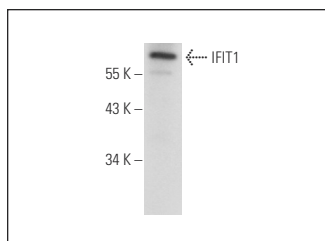
Molecular Weight of ESAM: 41 kDa.

Positive Controls: C6 whole cell lysate: sc-364373.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



IFIT1 (G-16): sc-82943. Western blot analysis of IFIT1 expression in C6 whole cell lysate.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.