

AR26005PU-N

Human ESAM (His-tag) - Purified

Alternate names:

Endothelial cell-selective adhesion molecule

Quantity:

20 µg

Background:

Endothelial cellselective adhesion molecule (ESAM) is a 55 kDa type I transmembrane glycoprotein that belongs to the JAM family of immunoglobulin superfamily molecules. Human ESAM is synthesized as a 390 amino acid (aa) protein composed of a 29 aa signal peptide, a 216 aa extracellular region, a putative 26 aa transmembrane segment, and a 119 aa cytoplasmic domain. The extracellular region contains one V-type and one C2-type Ig domain and is involved in hemophilic adhesion. In the cytoplasmic domain, there is a docking site for the multifunctional adaptor protein MAG11. The extracellular region of human ESAM shows 90%, 74%, 69% and 67% aa identity with monkey, canine, mouse and rat extracellular ESAM, respectively. ESAM is expressed on endothelial cells, activated platelets and megakaryocytes, and can be found associated with cell to cell junctions. Whether ESAM is restricted to a particular junctional type is not clear. ESAM deficient mice have no defect in vascularization but do have reduced angiogenic potential. This may be due to a decreased migratory response to FGF2. Soluble ESAM is fused to a C-terminal His-tag (6x His).

Uniprot ID:

[Q96AP7](#)

NCBI:

[NP_620411](#)

GeneID:

[90952](#)

Species:

Human

Source:

E. coli

Format:

State: Lyophilized protein

Purity: >95% by SDS-PAGE and silver stain

Buffer System: PBS

Stabilizers: None

Endotoxin Level: < 0.1 ng/µg of CCM-3

Reconstitution: Human ESAM should be restored in sterile water to a concentration of 0.1 mg/ml. This solution can be diluted in water or other buffer solutions or stored at -20°C.

Description:

Human recombinant ESAM (fragment), aa. 255

AA Sequence:

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ISLPGPLVTNLLRFLFLGLSALAPPSRAQLQLHLPANRLQAVEGGEVVLPAWYTLHGEVSSSQPWEVPFVMW
FFKQK
EKEDQVLSYINGVTTSKPGVSLVYSMPSRNLSLRLEGLQEKDSGPYSCSVVQDKQKSRGHSIKTLELNVLV
PPAPP
SCRLQGVPHVGANVTLSQCSPRSKPAVQYQWDRQLPSFTFFAPALDVIRGSLSLTNLSSSMAGVYVCKAHN
EVGTA
QCNVTLEVSTGPGARSHHHHHH
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Molecular weight: 27,80 kDa

Add. Information:	Protein RefSeq: NP_620411.2 mRNA RefSeq: NM_138961.2
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Hirata et al, J Biol Chem 276 (2001). 2. Nasdala et al, J Biol Chem 277 (2002). 3. Wegmann et al, Exp Cell Res 300 (2004). 4. Ishida et al, J Biol Chem 278 (2003).
Pictures:	SDS-PAGE analysis of recombinant human ESAM. Sample was loaded in 15% SDS-polyacrylamide gel under reducing conditions and stained with Coomassie blue.

