

Recombinant Human ESAM Protein

Catalog No. PKSH031780

Note: Centrifuge before opening to ensure complete recovery of vial contents.

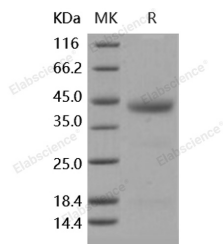
Description

Synonyms	W117m
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Ala 248
Accession	NP_620411.2
Calculated Molecular Weight	24.5 kDa
Observed molecular weight	40-45 kDa
Tag	None
Bioactivity	Not validated for activity

Properties

Purity	> 92 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 100mM NaCl, 50mM Tris, pH 7.5 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 92 % as determined by reducing SDS-PAGE.

Background

Endothelial cell-selective adhesion molecule (ESAM) is a member of JAM family of immunoglobulin superfamily and consists of one V-type and one C2-type immunoglobulin domain; as well as a hydrophobic signal sequence; a single

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transmembrane region; and a cytoplasmic domain. It is specifically expressed at endothelial tight junctions and on activated platelets. ESAM at endothelial tight junctions participates in the migration of neutrophils through the vessel wall; possibly by influencing endothelial cell contacts. The adaptor protein membrane-associated guanylate kinase MAGI-1 has been identified as an intracellular binding partner of ESAM. Previous studies have indicated that ESAM regulates angiogenesis in the primary tumor growth and endothelial permeability. It suggest that ESAM has a redundant functional role in physiological angiogenesis but serves a unique and essential role in pathological angiogenic processes such as tumor growth.