

## Recombinant Human ESAM Protein (aa 1-248, His Tag)

**Catalog Number:** PKSH031781

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

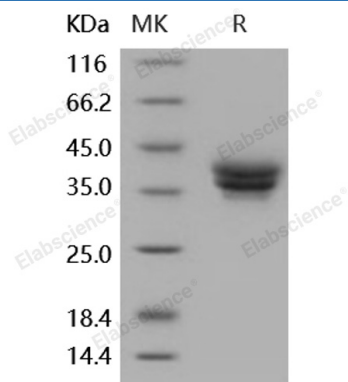
### Description

|                      |   |
|----------------------|---|
| <b>Species</b>       | Human   |
| <b>Source</b>        | HEK293 Cells-derived Human ESAM protein Met 1-Ala 248, with an C-terminal His |
| <b>Calculated MW</b> | 25.4 kDa  |
| <b>Observed MW</b>   | 35-40 kDa   |
| <b>Accession</b>     | NP_620411.2   |
| <b>Bio-activity</b>  | Not validated for activity  |

### Properties

|                       |  |
|-----------------------|--|
| <b>Purity</b>         | > 97 % as determined by reducing SDS-PAGE.   |
| <b>Endotoxin</b>      | < 1.0 EU per µg of the protein as determined by the LAL method.  |
| <b>Storage</b>        | 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. |
| <b>Shipping</b>       | This product is provided as lyophilized powder which is shipped with ice packs.  |
| <b>Formulation</b>    | Lyophilized from sterile PBS, pH 7.4<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>Please refer to the specific buffer information in the printed manual.              |
| <b>Reconstitution</b> | Please refer to the printed manual for detailed information.   |

### Data



> 97 % as determined by reducing SDS-PAGE.

### Background

### For Research Use Only

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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 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.