# Human E-Selectin / CD62e / SELE Protein (His Tag)

**Catalog Number:** **10335-H08H**

## General Information

**Gene Name Synonym:**

CD62E; ELAM; ELAM1; ESEL; LECAM2

**Protein Construction:**

A DNA sequence encoding the extracellular domain (Met 1-Pro 556) of human CD62E (NP_000441.2) precursor was expressed with the fused C-terminal polyhistidine tag.

**Source:** Human

**Expression Host:** HEK293 Cells

## QC Testing

**Purity:** > 97 % as determined by SDS-PAGE

**Endotoxin:**

< 1.0 EU per μg of the protein as determined by the LAL method

**Stability:**

Samples are stable for up to twelve months from date of receipt at -70 ℃

**Predicted N terminal:** Trp 22

**Molecular Mass:**

The recombinant human CD62E comprises 546 amino acids after removal of the signal peptide and has a predicted molecular mass of 60 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rh CD62E is approximately 110 kDa due to glycosylation.

**Formulation:**

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

## Usage Guide

**Storage:**

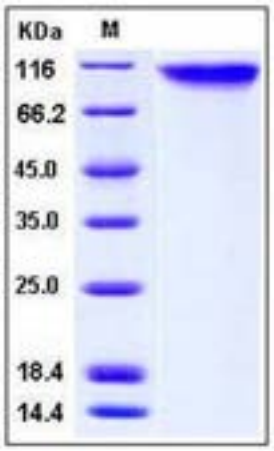
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

**Avoid repeated freeze-thaw cycles.**

**Reconstitution:**

Detailed reconstitution instructions are sent along with the products.

**SDS-PAGE:**




## Protein Description

E-selectin, also known as endothelial leukocyte adhesion molecule-1 (ELAM-1) and CD62E, is an inducible adhesion molecule that is expressed on the surfaces of stimulated vascular endothelial cells and is sometimes involved in cancer cell metastasis. E-selectin exhibits a complex mosaic structure consisting of a large extracellular region comprised of a lectin domain, an EGF-like domain, and a short consensus repeat (SCR) domain, followed by a transmembrane region and a relatively short (32 aa) cytoplasmic tail. As a member of the LEC-CAM or selectin family, E-selectin recognises and binds to sialylated carbohydrates including members of the Lewis X and Lewis A families found on monocytes, granulocytes, and T-lymphocytes. E-selectin supports rolling and stable arrest of leukocytes on activated vascular endothelium, and furthermore, it was indicated that it can also transduce an activating stimulus via the MAPK cascade into the endothelial cell during leukocyte adhesion. E-selectin regulates adhesive interactions between certain blood cells and endothelium. The soluble form of E selectin (sE-selectin) is a marker of endothelial activation, and has a potential role in the pathogenesis of cardiovascular disease as raised levels have been found in hypertension, diabetes and hyperlipidemia, although its association in established atherosclerosis disease and its value as a prognostic factor is more controversial. soluble E-selectin is inversely associated with the muscular component of the left ventricle, thereby suggesting that the lack of such a reparative factor may be associated with cardiac remodeling in end-stage renal disease (ESRD) patients. In addition, this adhesion molecule appears to be involved in the pathogenesis of atherosclerosis.

### References

1.Roldn V, *et al.* (2003) Soluble E-selectin in cardiovascular disease and its risk factors. A review of the literature. Thromb Haemost. 90(6): 1007-20. 2.Kawase J, *et al.* (2009) Increase in E-selectin expression in umbilical vein endothelial cells by anticancer drugs and inhibition by cimetidine. Oncol Rep. 22(6): 1293-7. 3.Matsumoto K, *et al.* (2010) Soluble adhesion molecule E-selectin predicts cardiovascular events in Japanese patients with type 2 diabetes mellitus. Metabolism. 59(3): 320-4.