



# Recombinant Protein Technical Manual

## Recombinant Human E-Selectin/SELE Protein (His & Fc Tag)(Active)

RPES4633

### Product Data:

**Product SKU:** RPES4633

**Size:** 100µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_000441.2

### Protein Information:

**Molecular Mass:** 86.5 kDa

**AP Molecular Mass:** 14050 kDa

**Tag:** C-His & Fc

**Bio-activity:** Measured by the ability of the immobilized protein to support the adhesion of U937 human histiocytic lymphoma cells. When cells are added to E-selectin coated plates (2 µg/mL, 100 µL/well) approximately > 60% will adhere specifically.

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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 PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** E-selectin (SELE); CD62 antigen-like family member E; Endothelial leukocyte adhesion molecule 1; Leukocyte-endothelial cell adhesion molecule 2; CD62E and ELAM1;ELAM;ESEL;LECAM2

## Immunogen Information:

**Sequence:** Met 1-Pro 556

## Background:

E-selectin, also known as endothelial leukocyte adhesion molecule (ELAM) 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.