

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse E-Selectin in ELISAs and Western blots. Does not cross-react with recombinant human (rh) E-Selectin, rmL-Selectin, or rhP-Selectin.
Source	Monoclonal Rat IgG ₁ Clone # 96419
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse E-Selectin Trp22-Pro557 Accession # Q00690
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	Recombinant Mouse E-Selectin/CD62E Fc Chimera (Catalog # 575-ES) under non-reducing conditions only
Mouse E-Selectin/CD62E Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Mouse E-Selectin/CD62E Antibody (Catalog # MAB5751)
ELISA Detection Standard	0.5-2.0 µg/mL	Mouse E-Selectin/CD62E Biotinylated Antibody (Catalog # BAM5752) Recombinant Mouse E-Selectin/CD62E Fc Chimera (Catalog # 575-ES)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

E-Selectin (Endothelial Leukocyte Adhesion Molecule-1, ELAM-1, CD62E), a member of the Selectin family, is a 107 - 115 kDa cell surface glycoprotein. It is transiently expressed on vascular endothelial cells in response to IL-1β and TNF-α, and demonstrates peak expression at 4 hours, and decay at 24 hours, in response to activation. E-Selectin ligands, expressed on neutrophils, monocytes, and a subset of memory T cells, are sialylated, fucosylated molecules which bind to the lectin domain of E-Selectin. Immunocytochemical techniques have demonstrated the expression of E-Selectin on healthy and diseased tissue. The human and mouse E-Selectin proteins share 81% amino acid similarity.

E-Selectin mediates the attachment of flowing leukocytes to the blood vessel wall during inflammation by binding to E-Selectin ligands on leukocytes. These interactions are labile and permit leukocytes to roll along the vascular endothelium in the direction of blood flow. This initial interaction is followed by a stronger interaction involving ICAM-1 and VCAM-1 that leads eventually to extravasation of the white blood cell through the blood vessel wall into the extracellular matrix tissue.

ELISA techniques have shown that detectable levels of soluble E-Selectin are present in the biological fluids of apparently normal individuals. Furthermore, a number of studies have reported that levels of E-Selectin may be elevated in subjects with a variety of pathological conditions.