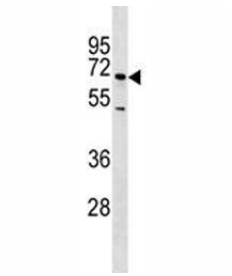
E-Selectin Antibody / SELE (F46199)

Catalog No.	Formulation	Size
F46199-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F46199-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P16581
Applications	Western blot: 1:1000
Limitations	This E-Selectin/SELE antibody is available for research use only.



E-Selectin/SELE antibody western blot analysis in NCI-H460 lysate. Predicted molecular weight: 64-115 kDa depending on glycosylation level.

Description

E-Selectin antibody, also known as SELE antibody, recognizes E-selectin, a calcium-dependent cell adhesion molecule encoded by the SELE gene and commonly referred to as CD62E and endothelial-leukocyte adhesion molecule 1. E-selectin is a type I transmembrane glycoprotein primarily localized to the plasma membrane of activated endothelial cells. It belongs to the selectin family of adhesion receptors, which also includes P-selectin and L-selectin, and it plays a central role in leukocyte-endothelial interactions during inflammation. Under resting conditions, E-selectin expression is low or absent, but it is rapidly induced in endothelial cells in response to pro-inflammatory cytokines such as interleukin-1 and tumor necrosis factor alpha.

E-Selectin antibody detects a protein composed of an N-terminal C-type lectin domain, an epidermal growth factor-like domain, multiple short consensus repeat units, a transmembrane region, and a short cytoplasmic tail. The lectin domain mediates binding to sialylated carbohydrate ligands on circulating leukocytes, including sialyl Lewis x structures present on neutrophils, monocytes, and certain lymphocyte subsets. Through these interactions, E-selectin supports leukocyte rolling along the vascular endothelium, a critical early step in extravasation and recruitment to sites of tissue injury or infection.

Functionally, E-selectin participates in acute and chronic inflammatory responses by facilitating tethering and rolling of leukocytes under shear flow conditions. Its regulated expression on endothelial cells links vascular activation with immune cell trafficking. Beyond classical inflammation, SELE expression has been implicated in tumor biology, where endothelial E-selectin can contribute to adhesion of circulating tumor cells and metastatic dissemination. Elevated E-selectin levels have also been associated with cardiovascular disease, atherosclerosis, and systemic inflammatory conditions, highlighting its relevance in vascular pathology research.

SELE gene expression is tightly controlled at the transcriptional level and is typically transient following cytokine stimulation. Because of its restricted expression to activated endothelium, E-selectin is widely used as a marker of endothelial activation in experimental models of inflammation and vascular dysfunction. Detection of E-selectin protein can provide insight into inflammatory signaling pathways, endothelial cell activation status, and leukocyte recruitment dynamics.

This E-Selectin antibody is suitable for detecting SELE protein expression in research applications. An antibody targeting E-selectin supports studies of vascular inflammation, endothelial biology, immune cell trafficking, and disease-associated endothelial activation.

Application Notes

Titration of the E-Selectin/SELE antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This E-Selectin/SELE antibody was produced from rabbits immunized with a human partial recombinant protein.

Storage

Aliquot the E-Selectin/SELE antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

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