

Datasheet for ABIN1672750
Soluble E-Selectin ELISA Kit



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Overview

Quantity:	96 tests
Target:	Soluble E-Selectin (sE-Selectin)
Binding Specificity:	AA 22-557
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	62.5-4000 pg/mL
Minimum Detection Limit:	62.5 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse sE-Selectin
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (citrate)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: W22-P557
Specificity:	Expression system for standard: NSO Immunogen sequence: W22-P557
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity: <10pg/mL

Material not included: Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target: Soluble E-Selectin (sE-Selectin)

Alternative Name: sE-Selectin ([sE-Selectin Products](#))

Background: Protein Function: Cell-surface glycoprotein having a role in immunoadhesion. Mediates in the adhesion of blood neutrophils in cytokine-activated endothelium through interaction with PSGL1/SELPLG. May have a role in capillary morphogenesis.

Background: E-selectin, also called endothelial-leukocyte adhesion molecule-1(ELAM-1), is a cell surface glycoprotein expressed by cytokine-activated endothelium that mediates the adhesion of blood neutrophils. An increased expression of E-selectin has been observed in the arterial endothelium interacting with lymphocytes and macrophages in human atherosclerotic lesions. E-selectin plays a critical role in mediating tissue-specific homing of T cells into skin, and of primitive hematopoietic progenitor cells(HPCs) into bone marrow(BM). A structurally and functionally related group of genes, lymph node homing receptor(LHR), granule membrane protein 140(GMP-140), and endothelial leukocyte adhesion molecule 1(ELAM-1) are shown to constitute a gene cluster on mouse and human chromosome 1. The standard product used in this kit is recombinant mouse E-Selectin, excluding intercellular E-Selectin and transmembrane domain. It consists of totally 557 amino acids with the molecular mass of 85.8KDa.

Synonyms: E-selectin,CD62 antigen-like family member E,Endothelial leukocyte adhesion molecule 1,ELAM-1,Leukocyte-endothelial cell adhesion molecule 2,LECAM2,CD62E,Sele,Elam-1,

Full Gene Name: E-selectin

Cellular Localisation: Cell membrane, Single-pass type I membrane protein.

Gene ID: 20339

UniProt: [Q00690](#)

Application Details

Application Notes: Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well

Application Details

assay was recommended for both standard and sample testing.

Comment: Sequence similarities: Belongs to the selectin/LECAM family.

Plate: Pre-coated

Protocol: mouse E-Selectin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for E-Selectin has been precoated onto 96-well plates. Standards(NSO, W22-P557) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for E-Selectin is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse E-Selectin amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 4000pg/mL, 2000pg/mL, 1000pg/mL, 500pg/mL, 250pg/mL, 125pg/mL, 62.5pg/mL mouse E-Selectin standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, serum or plasma(heparin, citrate) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse E-Selectin standard solution and each sample be measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(pg/ml): 797, Standard deviation: 30.29, CV(%): 3.8
- Sample 2: n=16, Mean(pg/ml): 1320, Standard deviation: 85.8, CV(%): 6.5
- Sample 3: n=16, Mean(pg/ml): 2756, Standard deviation: 140.56, CV(%): 5.1,
- Sample 1: n=24, Mean(pg/ml): 973, Standard deviation: 44.76, CV(%): 4.6
- Sample 2: n=24, Mean(pg/ml): 2185, Standard deviation: 157.3, CV(%): 7.2
- Sample 3: n=24, Mean(pg/ml): 3360, Standard deviation: 218.4, CV(%): 6.5

Restrictions: For Research Use only

Handling

Handling Advice: Avoid multiple freeze-thaw cycles.

Storage: -20 °C, 4 °C

Storage Comment: Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles

Expiry Date: 12 months

Publications

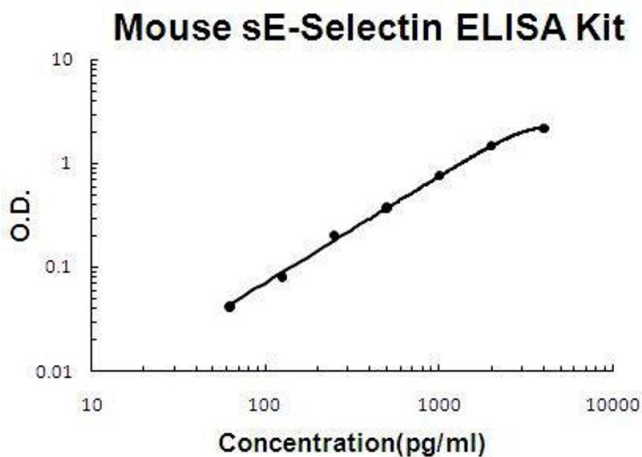
Product cited in:

Li, Ben, Yuan, Liu, Wu, Xu, Zhang: "Recruitment of HIV-1 target cells at topical mucosal sites: a sensitive and early marker for determining the safety of microbicide candidates." in: **Emerging microbes & infections**, Vol. 2, Issue 7, pp. e42, (2015) ([PubMed](#)).

Zhong, He, Yang, Bao, Zhang, Zhou, Chen, Li, Han, Yang, Sun, Cao, Li, Shi, Jiang, Zhang, Yan: "L-selectin and P-selectin are novel biomarkers of cervicovaginal inflammation for preclinical mucosal safety assessment of anti-HIV-1 microbicide." in: **Antimicrobial agents and chemotherapy**, Vol. 56, Issue 6, pp. 3121-32, (2012) ([PubMed](#)).

Iori, Vinci, Murphy, Marescotti, Avogaro, Ahluwalia: "Glucose and fatty acid metabolism in a 3 tissue in-vitro model challenged with normo- and hyperglycaemia." in: **PLoS ONE**, Vol. 7, Issue 4, pp. e34704, (2012) ([PubMed](#)).

Images



ELISA

Image 1. Mouse sE-Selectin PicoKine ELISA Kit standard curve