PRODUCT INFORMATION

Expression system Baculovirus

Domain 22-556aa

UniProt No. P16581

NCBI Accession No. NP_000441

Alternative Names

E-selectin, CD62E, ELAM, ELAM1, ELAM-1, ESEL, LECAM2, CD62 antigen-like family member E, endothelialleukocyte adhesion molecule 1, Leukocyte-endothelial cell adhesion molecule 2, SELE, CD62E antigen, ELAM1Eselectin, Endothelial leukocyte adhesion molecule 1

PRODUCT SPECIFICATION

Molecular Weight

59.4kDa(541aa)

Concentration 0.5mg/ml (determined by Absorbance at 280nm)

Formulation

Liquid. In Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity > 95% by SDS - PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Measured by the ability of the immobilized protein to support the adhesion of U937 human histiocytic lymphoma cells. When cells are added to human E-Seletin/CD62E coated plates 2ug/ml. This effect is more to 40%.

Tag

His-Tag

Application SDS-PAGE, Bioactivity

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.



BACKGROUND

Description

E-selectin, also known as CD62 antigen-like family member E (CD62E), is a member of the Selectin family. It is a selectin cell adhesion molecule expressed only on endothelial cells activated by cytokines. Like other selectins, it plays an important part in inflammation. The local release of cytokines IL-1 and TNF- α by Macrophages in the inflamed tissue induces the over-expression of E-selectin on endothelial cells of nearby blood vessels. As the inflammatory response progresses, chemokines released by injured tissue enter the blood vessels and activate the rolling leukocytes, which are now able to tightly bind to the endothelial surface and begin making their way into the tissue. While numerous pieces of in vitro and clinical evidence continue to support this hypothesis of E-selectin-mediated cancer metastasis, in vivo studies of cancer metastasis have shown that E-selectin knockout only minimally affects leukemic cell adhesion to bone immediately following injection. Recombinant human E-selectin, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

WSYNTSTEAM TYDEASAYCQ QRYTHLVAIQ NKEEIEYLNS ILSYSPSYYW IGIRKVNNVW VWVGTQKPLT EEAKNWAPGE PNNRQKDEDC VEIYIKREKD VGMWNDERCS KKKLALCYTA ACTNTSCSGH GECVETINNY TCKCDPGFSG LKCEQIVNCT ALESPEHGSL VCSHPLGNFS YNSSCSISCD RGYLPSSMET MQCMSSGEWS APIPACNVVE CDAVTNPANG FVECFQNPGS FPWNTTCTFD CEEGFELMGA QSLQCTSSGN WDNEKPTCKA VTCRAVRQPQ NGSVRCSHSP AGEFTFKSSC NFTCEEGFML QGPAQVECTT QGQWTQQIPV CEAFQCTALS NPERGYMNCL PSASGSFRYG SSCEFSCEQG FVLKGSKRLQ CGPTGEWDNE KPTCEAVRCD AVHQPPKGLV RCAHSPIGEF TYKSSCAFSC EEGFELHGST QLECTSQGQW TEEVPSCQVV KCSSLAVPGK INMSCSGEPV FGTVCKFACP EGWTLNGSAA RTCGATGHWS GLLPTCEAPT ESNIP<HHHHH H>

General References

Collins T, et al., (1991), J. Biol. Chem. 266:2466–2473. Kawase J, et al. (2009). Oncol Rep. 22:1293-1297. Matsumoto K, et al. (2010). Metabolism. 59:320-324.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain