

Monoclonal antibody to CD62E / E-Selectin (+CD62P) - FITC

Alternate names: CD62 antigen-like family member E, ELAM1, Endothelial leukocyte adhesion molecule 1,

LECAM2, Leukocyte-endothelial cell adhesion molecule 2, SELE

Catalog No.:BM311FTQuantity:25 μgConcentration:0.1 mg/ml

Background: CD62P is a member of the small selectin family of cellular adhesion molecules, which also

includes CD62E and CD62L. Its structure, similar to the other members of the selectin family, consists of an N terminal lectin like domain of C type, followed by an epidermal growth factor like motif, a series of short consensus repeats, a transmembrane domain, and a cytoplasmic tail. The CD62P antigen is a 140 kDa glycoprotein, located in the alpha granules and the dense granules of platelets and endothelial cells. Activation of these cells

results in rapid mobilization of CD62P from the storage granules to the cell surface.

Activated platelets have a stable CD62P expression, while the endothelial cells lose CD62P expression within 1 h of activation, because of endocytosis of the molecule. CD62P is also expressed on megakaryocytes, but resting platelets and endothelial cells show no surface

staining of CD62P.

 Uniprot ID:
 P16581

 NCBI:
 NP_000441

 GeneID:
 6401

Host / Isotype: Mouse / IgG1

Clone: 1.2B6

Immunogen: Human E-Selectin (ELAM-1).

Spleen cells from immunised BALB/c mice were fused with cells of the NS1 mouse

myeloma cell line.

Format: State: Liquid purified IgG fraction.

Purification: Affinity Chromatography on Protein A.

Buffer System: PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as

stabilizer.

Label: FITC - Fluorescein Isothiocyanate Isomer 1

Applications: Flow Cytometry: Use 10 μl of neat antibody to label 1 x 10e6 cells in 100 μl.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

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Specificity:

This antibody recognizes the CD62E and CD62P cell surface antigens. Although previously thought to recognise only Human CD62E, recent data shows that this antibody also recognizes Human CD62P, binding to a common epitope shared by these members of the selectin family.

Species: Human, Pig. Other species not tested.

Storage:

Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

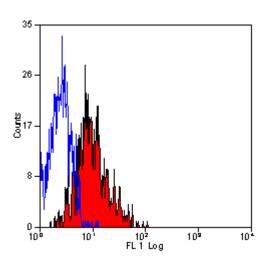
This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General References: 1. Wellicome, S.M. et al. (1990) A monoclonal antibody that detects a novel antigen on endothelial cells that is induced by TNF, IL-1 or lipopolysaccharide. J. Immunol. 144: 2558-2565.

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- 3. Kyan-Aung, V et al. (1991) Endothelial leukocyte adhesion molecule-1 and intercellular adhesion molecule-1 mediate the adhesion of eosinophils to endothelial cells in vitro and are expressed by endothelium in allergic cutaneous inflammation in vivo. J. Immunol. 146: 521-528.
- 4. Keelan, E.T. et al. (1994) Characterisation of E-Selectin expression in vivo using a radiolabelled monoclonal antibody. Am. J. Physiol. 266: H278-290.
- 5. Goda, K. et al. (1999) Characterization of an apparently conserved epitope in E- and P-selectin identified by dual specific monoclonal antibodies. Eur. J. Immunol. 29: 1551-1560.
- 6. Urquhart, P. et al. (2007) Carbon monoxide-releasing molecules modulate leukocyte-endothelial interactions under flow. J Pharmacol Exp Ther 321: 656-662.
- 7. Gómez del Moral, M. et al. (1999) African swine fever virus infection induces tumor necrosis factor alpha production: implications in pathogenesis. J Virol. 73: 2173-80.
- 8. Burton, V.J. et al. (2011) Bone morphogenetic protein receptor II regulates pulmonary artery endothelial cell barrier function. Blood. 117: 333-41.
- 9. Stocker, C.J. et al. (2000) TNF-alpha, IL-4, and IFN-gamma regulate differential expression of P- and E-selectin expression by porcine aortic endothelial cells. J Immunol. 164: 3309-15.

Pictures:



Staining of thrombin acitvated human peripheral blood platelets with mouse anti human CD62E/CD62P:FITC