TECHNICAL DATA SHEET

CyFlow™ CD62P Purified
Anti-Hu; Clone AK4

REF **AR454696**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD62P
Alternative Names	P-selectin
Clone	AK4
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Non-Human Primates
Negative Species Reactivity	—
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Human platelets

Specificity

The mouse monoclonal antibody AK4 recognizes CD62P antigen, a 140 kD single chain type I transmembrane glycoprotein present in secretory α-granules in platelets, in Weibel-Palade bodies in endothelial cells and in megakaryocytes; it is relocated to the plasma membrane upon activation.

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Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Western blot
- Immunocytochemistry
- Functional assays

Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

CD62P (P-selectin) is an adhesion glycoprotein that is expressed on platelets and endothelial cells upon their activation. Interaction between CD62P and its mucin-like ligand PSGL-1 (P-selectin glycoprotein ligand-1) expressed on the microvilli of most leukocytes supports leukocyte rolling along postkapillary venules at the earliest time of inflammation. Both CD62P and PSGL-1 are extended glycoproteins that form homodimers. CD62P dimerization is probably mediated through interactions of the transmembrane domains and stabilizes leukocyte tethering and rolling, probably by increasing rebinding within a bond cluster.

References

- Dunlop LC, Skinner MP, Bendall LJ, Favaloro EJ, Castaldi PA, Gorman JJ, Gamble JR, Vadas MA, Berndt MC: Characterization of GMP-140 (P-selectin) as a circulating plasma protein. J Exp Med. 1992 Apr 1; 175(4):1147-50. < PMID: 1372646 >
- Holme PA, Müller F, Solum NO, Brosstad F, Frøland SS, Aukrust P: Enhanced activation of platelets with abnormal release of RANTES in human immunodeficiency virus type 1 infection. FASEB J. 1998 Jan; 12(1):79-89. < PMID: 9438413 >

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- Kowalska MA, Ratajczak J, Hoxie J, Brass LF, Gewirtz A, Poncz M, Ratajczak MZ: Megakaryocyte precursors, megakaryocytes and platelets express the HIV co-receptor CXCR4 on their surface: determination of response to stromal-derived factor-1 by megakaryocytes and platelets. Br J Haematol. 1999 Feb; 104(2):220-9. < PMID: 10050701 >
- Ludwig RJ, Schultz JE, Boehncke WH, Podda M, Tandi C, Krombach F, Baatz H, Kaufmann R, von Andrian UH, Zollner TM: Activated, not resting, platelets increase leukocyte rolling in murine skin utilizing a distinct set of adhesion molecules. J Invest Dermatol. 2004 Mar; 122(3):830-6. < PMID: 15086572 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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