

# **TECHNICAL DATA SHEET**

# CyFlow™ CD62P Biotin Anti-Hu; Clone AK4



CU508361

# For Research Use Only. Not for use in diagnostic or therapeutic procedures.

#### **Specifications**

Antigen	CD62P
Alternative Names	P-selectin
Clone	AK4
Clonality	monoclonal
Format	Biotin
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  $\alpha$ -granules in platelets, in Weibel-Palade bodies in endothelial cells and in megakaryocytes; it is relocated to the plasma membrane upon activation.

#### **Contact Information:**

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## **Application**

The reagent is designed for indirect immunofluorescence analysis by Flow Cytometry. Working concentrations should be determined by the investigator.

Other usages may be determined from the scientific literature.

#### **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 >
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- Kowalska MA, Ratajczak J, Hoxie J, Brass LF, Gewirtz A, Poncz M, Ratajczak MZ: Megakaryocyte
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 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.
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The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.	
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