

TECHNICAL DATA SHEET

CyFlow™ CD62P PE Anti-Hu; Clone AK4

REF AM736744

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	CD62P
Alternative Names	P-selectin
Clone	AK4
Clonality	monoclonal
Format	PE
Host / Isotype	Mouse / IgG1
Species Reactivity	Human, Non-Human Primates
Negative Species Reactivity	—
Quantity	100 tests
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

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 20 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

Storage Buffer

The reagent is provided in stabilizing 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

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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:

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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. < PMID: 15086572 >

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

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