

1P-667-T025

## Monoclonal Antibody to CD62P Phycoerythrin (PE) conjugated (25 tests)

Clone: AK4

**Isotype:** Mouse IgG1

Specificity: The antibody AK4 recognizes CD62P (P-selectin), 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.

HLDA VI; WS Code P-44

Regulatory Status: RUO

Immunogen: Human platelets

Species Reactivity: Human, Non-Human Primates

Preparation: The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum

conditions. The conjugate is purified by size-exclusion chromatography and

adjusted for direct use. No reconstitution is necessary.

Storage Buffer: The reagent is provided in stabilizing phosphate buffered saline (PBS) solution

containing 15mM sodium azide.

**Storage / Stability:** Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not

use after expiration date stamped on vial label.

Usage: The reagent is designed for Flow Cytometry analysis of human blood cells using

20 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension.

The content of a vial (0.5 ml) is sufficient for 25 tests.

Expiration: See vial label

Lot Number: See vial label

Background: 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.



## PRODUCT DATA SHEET

## References:

\*Skinner MP, Lucas CM, Burns GF, Chesterman CN, Berndt MC: GMP-140 binding to neutrophils is inhibited by sulfated glycans. J Biol Chem. 1991 Mar 25;266(9):5371-4.

\*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.

\*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.

\*Kowalska MA, Řatajczak 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. \*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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