

1P-667-T100

Monoclonal Antibody to CD62P Phycoerythrin (PE) conjugated (100 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 10⁶ cells in a suspension.

The content of a vial (2 ml) is sufficient for 100 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.

For laboratory research only, not for drug, diagnostic or other use.



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.

Unless indicated otherwise, all products are For Research Use Only and not for diagnostic or therapeutic use. Not for resale or transfer either as a stand-alone product or as a component of another product without written consent of EXBIO. EXBIO will not be held responsible for patent infringement or other violations that may occur with the use of our products. All orders are accepted subject to EXBIO's term and conditions which are available at www.exbio.cz.