



1Y-450-T025

## Monoclonal Antibody to CD62P PE-Dyomics 647 (PE-DY647) conjugated (25 tests)

|                             |   |
|-----------------------------|---|
| <b>Clone:</b>               | HI62P   |
| <b>Isotype:</b>             | Mouse IgG1  |
| <b>Specificity:</b>         | The antibody HI62P 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.   |
| <b>Immunogen:</b>           | Human platelets   |
| <b>Species Reactivity:</b>  | Human   |
| <b>Preparation:</b>         | The purified antibody is conjugated with tandem dye PE-Dyomics 647 (PE-DY647) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.   |
| <b>Storage Buffer:</b>      | The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.   |
| <b>Storage / Stability:</b> | 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. Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.   |
| <b>Usage:</b>               | 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.   |
| <b>Expiration:</b>          | See vial label  |
| <b>Lot Number:</b>          | See vial label  |
| <b>Background:</b>          | 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 postcapillary 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.**



**Antibodies**

**References:**

\*Ramachandran V, Yago T, Epperson TK, Kobzdej MM, Nollert MU, Cummings RD, Zhu C, McEver RP: Dimerization of a selectin and its ligand stabilizes cell rolling and enhances tether strength in shear flow. Proc Natl Acad Sci U S A. 2001 Aug 28;98(18):10166-71.

\*Ramachandran V, Williams M, Yago T, Schmidtke DW, McEver RP: Dynamic alterations of membrane tethers stabilize leukocyte rolling on P-selectin. Proc Natl Acad Sci U S A. 2004 Sep 14;101(37):13519-24.

\*Martinez M, Joffraud M, Giraud S, Ba&iuml;sse B, Bernimoulin MP, Schapira M, Spertini O: Regulation of PSGL-1 interactions with L-selectin, P-selectin, and E-selectin: role of human fucosyltransferase-IV and -VII. J Biol Chem. 2005 Feb 18;280(7):5378-90.

\*Harakawa N, Shigeta A, Wato M, Merrill-Skoloff G, Furie BC, Furie B, Okazaki T, Domae N, Miyasaka M, Hirata T. P-selectin glycoprotein ligand-1 mediates L-selectin-independent leukocyte rolling in high endothelial venules of peripheral lymph nodes. Int Immunol. 2007 Mar;19(3):321-9.

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