

Analyte Specific Reagent.

Analytical and performance characteristics are not established.

SPECIFICITY

CD62P (P-selectin/GMP-140/PADGEM) is a member of the selectin family. Like other selectins (CD62E and CD62L), CD62P contains an amino terminal lectin-like domain, followed by an EGF domain, nine short consensus repeats (SCR), a transmembrane domain and a short cytoplasmic domain. The structural and functional properties of selectins and their ligands are reviewed in Ref 1. CD62P (140 kDa) is present in megakaryocytes, in Weibel-Palade bodies of endothelial cells and in alpha-granules of platelets (2). CD62P is translocated to the surface membrane upon in vitro and in vivo activation. CD62P is involved in the interaction between activated platelets and both monocytes and neutrophils (3) and is one of the players in the cytoadherence of Plasmodium falciparum-infected erythrocytes to activated platelets and vascular endothelium (4).

CLB-Thromb/6 (also known as S057) recognizes the boundary region between the lectin and EGF-like domains (5, 6).

This antibody has been assigned to the CD62P cluster of differentiation at the IVth International Workshop on Human Leucocyte Differentiation Antigens in Vienna, Austria, in 1989 (7).

REAGENT

IOTest CD62P-PE Conjugated Antibody
PN IM1759U – 2 mL Liquid – 20 µL / test*.

Clone CLB-Thromb/6
Isotype IgG1, mouse
Immunogen Human platelets
Hybridoma Myeloma SP2/0 Ag14 x mouse Balb/c x A/J spleen cells

Source Ascites fluid
Purification Ion exchange or affinity chromatography

Conjugation R-phycoerythrin (PE) is conjugated at 0.5 – 1.5 moles of PE per mole of Ig.

Fluorescence PE (orange-red)
Excites at 486 – 580 nm
Emits at 568 – 590 nm

REAGENT CONTENTS

This reagent is provided in phosphate-buffered saline, with 0.1% sodium azide (NaN₃) as preservative, and 2.0 mg / mL bovine serum albumin (BSA).

STATEMENT OF WARNINGS

1. This reagent contains 0.1% sodium azide. Sodium azide under acid conditions yields hydrazoic acid, an extremely toxic compound. Azide compounds should be flushed with running water while being discarded. These precautions are recommended to avoid deposits in metal piping in which explosive conditions can develop. If skin or eye contact occurs, wash excessively with water.
2. Do not use antibody beyond the expiration date on the label.
3. Samples and all material coming in contact with them should be handled as if capable of transmitting infection and disposed of with proper precautions.
4. Never pipet by mouth and avoid contact of samples with skin and mucous membranes
5. Minimize exposure of reagent to light during storage or incubation.
6. Avoid microbial contamination of reagents or incorrect results might occur.
7. Use good laboratory practices when handling this reagent.

STORAGE CONDITIONS AND STABILITY

This reagent is stable up to the expiration date when stored at 2 – 8°C. Do not freeze. Minimize exposure to light.

EVIDENCE OF DETERIORATION

Any change in the physical appearance of this PE-labeled reagent (clear colorless to pinkish liquid) or any major variation in values obtained for control samples may indicate deterioration and the reagent should not be used.

REAGENT PREPARATION

No preparation is necessary. This monoclonal antibody may be used directly from the vial. Bring reagent to 18 – 25°C prior to use.

SELECTED RESEARCH REFERENCES

1. Kansas, G.S., "Selectins and their ligands: current concepts and controversies", 1996, Blood, 88, 3259-3287.
2. McEver, R.P., "Properties of GMP-140, an inducible granule membrane protein of platelets and endothelium", 1990, Blood Cells, 16, 73-83.

3. de Bruijne-Admiraal, L.G., Modderman, P.W., Von der Borne, A.E.G.Kr., Sonnenberg, A., "P-Selectin Mediates Ca²⁺-Dependent Adhesion of Activated Platelets to Many Different Types of Leukocytes : Detection by Flow Cytometry", 1992, Blood, 80, 134-142.
4. Hao, M., Schollaardt, T., Niu, X., Looresuwana, Patel, K.D., Kubes, P., "Characterization of Plasmodium falciparum-infected erythrocyte and P-selectin interaction under flow conditions", 1998, Blood, 12, 4803-4809.
5. Saunders, K.B., Kansas, G.S., Tedder, T.F., "Domain mapping of the selectin panel of mAb", 1993, Tissue Antigens, 4, 42, 294.
6. Diacovo, T., Springer, T.A., "CD62P (P-selectin) cluster report", 1995, Leucocyte Typing V, White Cell Differentiation Antigens. Schlossman, S.F., et al., Eds., Oxford University Press, 1500-1501.
7. Modderman, P.W., "New clusters of antibodies against platelet activation antigen : CD62 and CD63", 1984, Leucocyte Typing I, Bernard, A. et al. Eds., Springer Verlag, 1038-1042.

PRODUCT AVAILABILITY

IOTest CD62P-PE Conjugated Antibody
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PE is licensed under patent 4,520,110.

For additional information in the USA, call 800-526-7694.

Outside the USA, contact your local Beckman Coulter representative.

www.beckmancoulter.com

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(*) : 20 µL is the quantity of product sufficient to stain

5 x 10⁵ cells in a standard immunofluorescence assay