



PC-309-T025

## Monoclonal Antibody to CD41 PerCP (25 tests)

<b>Clone:</b>	MEM-06
<b>Isotype:</b>	Mouse IgG1
<b>Specificity:</b>	The antibody MEM-06 reacts with CD41 (GPIIb), a transmembrane glycoprotein (integrin family) composed of two chains GPIIb alpha (heavy chain; 120 kDa) and GPIIb beta (light chain; 23 kDa). CD41 is mainly expressed on platelets and megakaryocytes.
<b>Immunogen:</b>	Leukocytes of patient suffering from LGL-type leukaemia.
<b>Species Reactivity:</b>	Human
<b>Preparation:</b>	The purified antibody is conjugated with Peridinin-chlorophyll-protein complex (PerCP) 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 10 µl reagent / 100 µl of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (0.25 ml) is sufficient for 25 tests.
<b>Expiration:</b>	See vial label
<b>Lot Number:</b>	See vial label
<b>Background:</b>	CD41 (platelet glycoprotein IIb) is composed of two subunits (120 kDa a, alpha and 23 kDa b, beta) that interact with CD61 in the presence of calcium to form a functional adhesive protein receptor. Upon blood vessel damage, this receptor binds to a variety of proteins including von Willebrand factor, fibrinogen, fibronectin and vitronectin. CD41 is mainly expressed on megakaryocyte-platelet lineage, but generally belongs to the antigens that are expressed during early stages of hematopoietic differentiation.

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



**Antibodies**

**References:**

\*Debili N, Robin C, Schiavon V, Letestu R, Pflumio F, Mitjavila-Garcia MT, Coulombel L, Vainchenker W: Different expression of CD41 on human lymphoid and myeloid progenitors from adults and neonates. *Blood*. 2001 Apr 1;97(7):2023-30.

\*Mitjavila-Garcia MT, Cailleret M, Godin I, Nogueira MM, Cohen-Solal K, Schiavon V, Lecluse Y, Le Pesteur F, Lagrue AH, Vainchenker W: Expression of CD41 on hematopoietic progenitors derived from embryonic hematopoietic cells. *Development*. 2002 Apr;129(8):2003-13.

\*Ferkowicz MJ, Starr M, Xie X, Li W, Johnson SA, Shelley WC, Morrison PR, Yoder MC: CD41 expression defines the onset of primitive and definitive hematopoiesis in the murine embryo. *Development*. 2003 Sep;130(18):4393-403.

\*Zhang J, Varas F, Stadtfeld M, Heck S, Faust N, Graf T: CD41-YFP mice allow in vivo labeling of megakaryocytic cells and reveal a subset of platelets hyperreactive to thrombin stimulation. *Exp Hematol*. 2007 Mar;35(3):490-499.

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