



Antibodies

A4-309-T025

## Monoclonal Antibody to CD41 Alexa Fluor® 488 conjugated (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. Workshop: HLDA 10
<b>Regulatory Status:</b>	RUO
<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 Alexa Fluor® 488 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 stabilizing phosphate buffered saline (PBS) solution containing 15mM sodium azide.
<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.
<b>Usage:</b>	The reagent is designed for Flow Cytometry analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10 <sup>6</sup> cells in a suspension. The content of a vial (0.1 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.
- \*Pagani G, Pereira JPV, Stoldt VR, Beck A, Scharf RE, Gohlke H: The human platelet antigen-1b (Pro33) variant of  $\alpha$ IIb $\beta$ 3 allosterically shifts the dynamic conformational equilibrium of this integrin toward the active state. *J Biol Chem*. 2018 Mar 30;293(13):4830-4844.
- \*Belizaire RM, Prakash PS, Richter JR, Robinson BR, Edwards MJ, Caldwell CC, Lentsch AB, Pritts TA: Microparticles from stored red blood cells activate neutrophils and cause lung injury after hemorrhage and resuscitation. *J Am Coll Surg*. 2012 Apr;214(4):648-55
- \*Komsa-Penkova R, Todinova SJ, Andreeva TD, Krumova SB, Taneva SG, Golemanov GM, Georgieva GA, Mihaylova NM, Tchorbanov PT: Alterations in platelet activity and elastic modulus of healthy subjects, carriers of G20210A polymorphism in the prothrombin gene. *J Biomed Clin Res Volume 9 Number 1*, 2016

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