

1P-309-T025

Monoclonal Antibody to CD41 Phycoerythrin (PE) conjugated (25 tests)

Clone:	MEM-06
Isotype:	Mouse IgG1
Specificity:	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
Regulatory Status:	RUO
Immunogen:	Leukocytes of patient suffering from LGL-type leukaemia.
Species Reactivity:	Human
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 10 ⁶ cells in a suspension. The content of a vial (0.5 ml) is sufficient for 25 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	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 α IIb β 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

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.

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

EXBIO Praha | Nad Safinou II 341 | 252 50 Vestec u Prahy | Czech Republic
Tel: +420 261 090 666 | Fax: +420 261 090 660 | orders@exbio.cz | www.exbio.cz