



## CD42a

**Product:** Anti human Platelet GPIX Monoclonal Antibody

**Description:** Single-chain membrane glycoprotein that forms a non-covalent complex with GPIb. (MW 23kDa) Reactivity with resting and activated platelets, weakly on monocytes, megakaryocytes and attachment site for the platelet plasma membrane to the submembrane cytoskeleton. GPIb/IX complex, functions as the receptor for ristocetin-induced binding of von Willebrand factor and as the von Willebrand factor-depend adhesion receptor.

**Isotype:** Mouse IgG-1 kappa

**Clone:** ESS

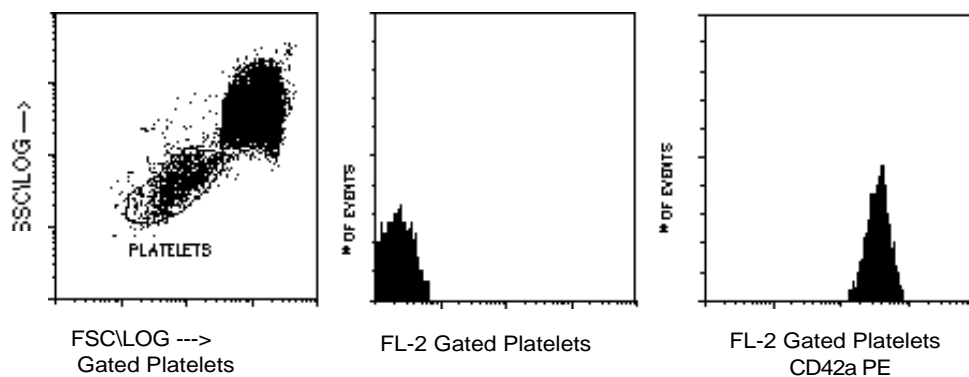
**Applications:** Identification of platelets; Identification of megakaryocytes; Diagnosis of Bernard-Soulier syndrome (CD42a-); Megakaryoblastic/cytic leukemia's (CD42a+).

**Use:** Consult the appropriate Exalpa Negative Control factsheet to determine the amount of antibody to be used as a control for Platelets. Collect blood aseptically by venipuncture into an ACD or EDTA blood collection tube. Important: Within 5 minutes of blood collection, fix blood sample by placing 100  $\mu$ l of blood in test tube containing 1 ml of cold (4<sup>0</sup>C) 1X PBS with 1% paraformaldehyde. Mix by vortexing. Centrifuge the fixed blood at 1200 x g for 5 minutes at room temperature (RT) 20<sup>0</sup>C. Aspirate the supernatant, leave pellet. Prior to staining, wash the fixed blood pellet 2X with 1 ml 1X PBS + 0.1% Azide at RT. Centrifuge the fixed blood at 1200 x g for 5 minutes at room temperature (RT) 20<sup>0</sup>C. Aspirate the supernatant, leave pellet. Resuspend the pellet in 1 ml of 1X PBS at RT. To a clean labeled test tube add 10  $\mu$ l of Exalpa monoclonal antibody. Carefully add 50  $\mu$ l of the fixed blood suspension to the bottom of the test tube. Vortex and incubate at room temperature for at least 15 minutes and analyzed within 3 hours. Please note: Using this procedure will yield twenty samples for platelet analysis. Select logarithmic (Log) amplification for both Forward (FSC) and Side (SSC) scatters, while collecting data for platelets. See instrument manufacturer's instructions for Immunofluorescence analysis with a flow cytometer or microscope.

**Storage:** Conjugated antibodies are supplied in PBS, 0.08% sodium azide and 0.2% protein carrier and should be stored at 4-8<sup>0</sup>C. Conjugated antibodies should not be frozen. Reagents are stable for the period shown on the vial label when stored properly.

Ordering Information:	Form	Vial Size	Catalog #
	FITC	100 Test	42A2
	Biotin	100 Test	42A3
	PE	100 Test	42A4

**For research use only. Not for use in human diagnostics or therapeutics.**



Legend: Peripheral Blood, gated on Platelets and Stained with Exalpa's PE Conjugated anti-CD42a. Note: When staining Platelets with Exalpa's CD42a PE, it is essential to use Exalpa's PE conjugated Isotype Negative Control, Cat.# OPPE.

#### REFERENCES:

1. Detection of platelet activation with monoclonal antibodies and flow cytometry. Fijnheer R., Modderman P.W., Veldman H., et al. *Transfusion* 1990;30:20-25
2. Glycoprotein Ib and glycoprotein IX are fully complexed in the intact platelet membrane Du X, Beutler L., Ruan C., Castaldi P.A., and Berndt M.C., *Blood* 1987;69:1524-1527
3. Structure of the glycoprotein Ib-IX complex from platelet membranes Fox JEB, Aggerbeck L.P., Berndt M.C., *J. Biol. Chem.* 1988;263:4882-4890
4. Leucocyte Typing IV: White Cell Differentiation Antigens Nieuwenhuis H.K. Report on functional studies. In: Knapp W., Dorken B., Gilks W.R., et al, eds. Oxford: Oxford University Press: 1989:1002-1003.

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