

## TECHNICAL DATA SHEET

### CyFlow™ CD42a Purified Anti-Hu; Clone GR-P

**REF** AK114812

**For Research Use Only.  
Not for use in diagnostic or therapeutic procedures.**

### Specifications

<b>Antigen</b>	CD42a
<b>Alternative Names</b>	GPIX
<b>Clone</b>	GR-P
<b>Clonality</b>	monoclonal
<b>Format</b>	Purified
<b>Host / Isotype</b>	Mouse / IgG1
<b>Species Reactivity</b>	Human, Dog
<b>Negative Species Reactivity</b>	—
<b>Quantity [Concentration]</b>	0.1 mg [ 1 mg/ml ]
<b>Immunogen</b>	Human acute lymphoblastic leukemia cells

### Specificity

The mouse monoclonal antibody GR-P (GRP-P) recognizes CD42a antigen, a 22 kDa transmembrane protein constitutively expressed on megakaryocytes and platelets.

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## Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry

## Storage Buffer

The reagent is provided in phosphate buffered saline (PBS) solution, pH  $\approx$ 7.4, containing 0.1% (w/v) sodium azide.

## Storage and Stability

<b>Storage</b>	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
<b>Stability</b>	Do not use after expiration date stamped on vial label.

## Background Information

CD42a (GPIX; Glycoprotein 9) composes together with GPIb  $\alpha$ , GPIb  $\beta$  and GPV the GPIb-IX-V receptor complex critical in the process of platelet-rich thrombus formation by tethering the platelet to a thrombogenic surface. CD42b binds to von Willebrand factor (VWF) exposed at a site of vascular injury, as well as to thrombin, coagulation factors XI and XII, high molecular weight kininogen, TSP-1, integrin Mac-1 and P-selectin. Defects in the gene encoding CD42a are a cause of Bernard-Soulier syndrome, also known as giant platelet disease. These patients have unusually large platelets and have a clinical bleeding tendency.

## References

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- Harding SA, Din JN, Sarma J, Josephs DH, Fox KA, Newby DE: Promotion of proinflammatory interactions between platelets and monocytes by unfractionated heparin. Heart. 2006 Nov; 92(11):1635-8. < PMID: 16709700 >
- Vettore S, Scandellari R, Moro S, Lombardi AM, Scapin M, Randi ML, Fabris F: Novel point mutation in a leucine-rich repeat of the GPIb alpha chain of the platelet von Willebrand factor receptor, GPIb/IX/V,

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- Din JN, Aftab SM, Jubb AW, Carnegy FH, Lyall K, Sarma J, Newby DE, Flapan AD: Effect of moderate walnut consumption on lipid profile, arterial stiffness and platelet activation in humans. *Eur J Clin Nutr*. 2011 Feb; 65(2):234-9. < PMID: 21048773 >

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The Safety Data Sheet for this product is available at [www.sysmex-partec.com/services](http://www.sysmex-partec.com/services).

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