

30-1529-PE-Cy7: Anti-CD42a Monoclonal Antibody (Clone:GR-P) PE-Cy™ 7 Conjugated

Clonality :	Monoclonal
Clone Name :	GR-P
Application :	FACS
Reactivity :	Human
Gene :	GP9
Gene ID :	2815
Uniprot ID :	P14770
Format :	Purified
Alternative Name :	GP9
Isotype :	Mouse IgG1
Immunogen Information :	Human acute lymphoblastic leukemia cells

Description

Specificity: The mouse monoclonal antibody GR-P (also known as GRP-P) recognizes an extracellular epitope of CD42a (glycoprotein 9), a 22 kDa transmembrane protein constitutively expressed on megakaryocytes and platelets.

Description: CD42a, also known as Glycoprotein 9 (GPIX), 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.

Product Info

Amount :	100 tests
Purification :	Purified antibody is conjugated with activated tandem dye of R-phycoerythrin-cyanine 7 (PE-Cy™ 7) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Content :	Formulation: Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage condition :	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

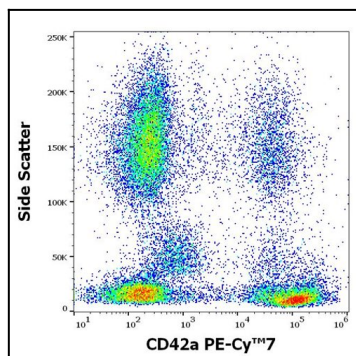


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD42a (GR-P) PE-Cy™7 antibody (4 µl reagent / 100 µl of peripheral whole blood).

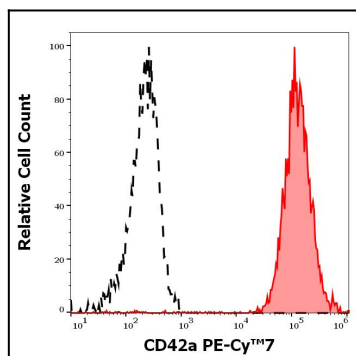


Figure 2: Separation of human CD45 negative CD42a positive platelets (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD42a (GR-P) PE-Cy™7 antibody (4 µl reagent / 100 µl of peripheral whole blood).