

30-2565: Anti-Human CD42b APC (Clone : AK2)

Clonality :	Monoclonal
Clone Name :	AK2
Application :	FACS
Reactivity :	Human
Conjugate :	APC
Gene :	GP1BA
Gene ID :	2811
Alternative Name :	BSS, GP1B, VWDP, CD42B, GPIbA, BDPLT1, BDPLT3, DBPLT3, glycoprotein Ib platelet subunit alpha
Isotype :	Mouse IgG1
Immunogen Information :	Human platelets

Description

CD42b (GPIb alpha) composes together with GPIb beta, GPIX 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. The extracellular domain of CD42b by its interactions also contributes to metastasis.

Specificity : The mouse monoclonal antibody AK2 recognizes an extracellular epitope of CD42b (GPIb alpha), a 135-145 kDa membrane glycoprotein expressed on platelets and megakaryocytes. CD42b and CD42c (GPIb beta) are composed in a disulfide linked heterodimer (CD42b/c; 160 kDa); CD42b/c forms a noncovalent complex with CD42a and CD42d.

Product Info

Amount :	100 tests
Purification :	The purified antibody is conjugated with allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Content :	Formulation : Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide
Storage condition :	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 10 μ l reagent / 100 μ l of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

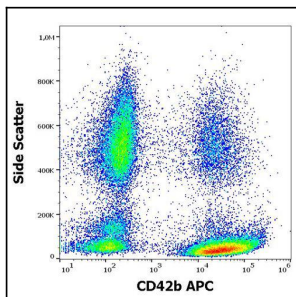


Figure 1 : Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD42b (AK2) APC antibody (10 μ l reagent / 100 μ l of peripheral whole blood).

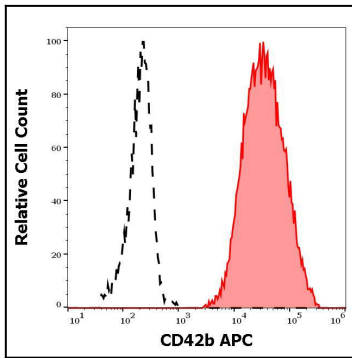


Figure 2 : Separation of human CD45 negative CD42b positive thrombocytes (red-filled) from CD42b negative neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD42b (AK2) APC antibody (10 μ l reagent / 100 μ l of peripheral whole blood).