

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

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

<b>Amount :</b>	100 tests
<b>Purification :</b>	The purified antibody is conjugated with allophycocyanin (APC) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
<b>Content :</b>	Formulation : Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide
<b>Storage condition :</b>	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  $\mu$ l reagent / 100  $\mu$ l of whole blood or  $10^6$  cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

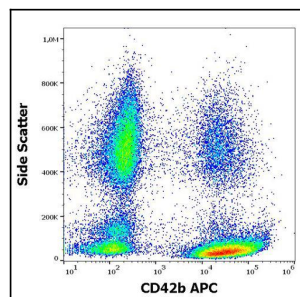


Figure 1 : Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD42b (AK2) APC antibody (10  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

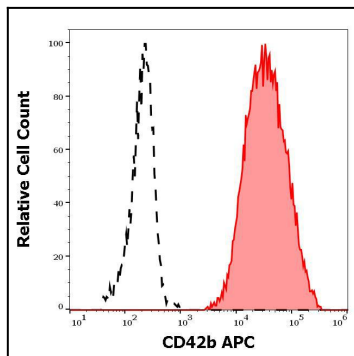


Figure 2 : Separation of human CD45 negative CD42b positive thrombocytes (red-filled) from CD42b negative neutrophil granulocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD42b (AK2) APC antibody (10 µl reagent / 100 µl of peripheral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