

30-2657: Anti-Human CD133 APC (Clone : W6B3C1)

Clonality :	Monoclonal
Clone Name :	W6B3C1
Application :	FACS
Reactivity :	Human
Conjugate :	APC
Gene :	PROM1
Gene ID :	8842
Alternative Name :	Prominin 1, PROM1, AC133, PROML1, STGD4, prominin 1
Isotype :	Mouse IgG1
Immunogen Information :	WERI-RB-1 retinoblastoma cell line

Description

CD133 (prominin 1) is a 5-transmembrane glycoprotein with extracellular N- and intracellular C-terminus. CD133 function remains to be elucidated, but it can be used as a cancer stem cell marker. Its expression pattern in progenitor cells is similar to CD34, i.e. on hematopoietic stem cells in bone marrow, cord blood, neural stem cells, retinoblastoma, or endothelial precursor cells (not mature endothelial cells). It is being used for identification and isolation of hematopoietic stem cells, including isolation for stem cell transplantation. Expression of CD133 correlates with differentiation of human colon cancer cells.

Specificity : The mouse monoclonal antibody W6B3C1 recognizes the extracellular glycosylated epitope 1 on human CD133 (CD133/1), a 120 kDa glycoprotein of prominin family, expressed e.g. on progenitor cells. This antibody is important for identification of stem cells and tumor cells.

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.

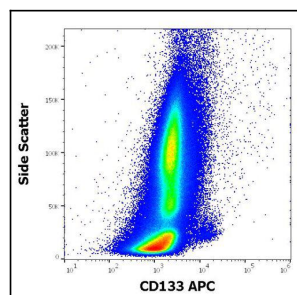


Figure 1 : Flow cytometry surface staining pattern of human bone marrow cells stained using anti-human CD133 CD133 (W6B3C1) APC antibody (10 μ l reagent per million cells in 100 μ l of cell suspension).

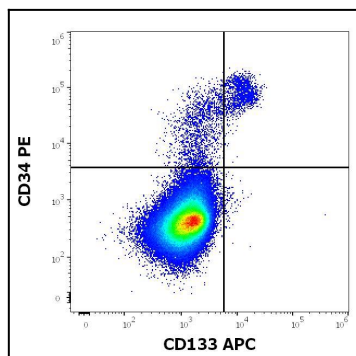


Figure 2 : Flow cytometry multicolor surface staining of human bone marrow cells stained using anti-human CD133 (W6B3C1) APC antibody (10 μ l reagent per milion cells in 100 μ l of cell suspension) and anti-human CD34 (581) PE antibody (20 μ l reagent per milion cells in 100 μ l of cell suspension).

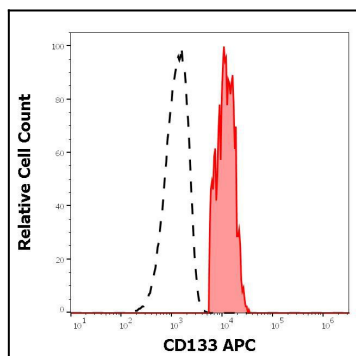


Figure 3 :Separation of human CD133 positive CD34 positive stem cells (red-filled) from CD133 negative CD34 negative cells (black-dashed) in flow cytometry analysis (surface staining) of human bone marrow cells stained using anti-human CD133 (W6B3C1) APC antibody (10 μ l reagent per milion cells in 100 μ l of cell suspension).