

CD34 (4H11)

Analyte Specific Reagent (ASR)*

Type	Number of tests	Volume per test (μL)	Total volume (μL)	Catalog number
PE	50	5	250	4089022
	100	5	500	4089025
APC	50	5	250	4089042
	100	5	500	4089045
PerCP-Cyanine5.5	50	5	250	4089062
	100	5	500	4089065
iFluor™ 700	50	5	250	4089192
	100	5	500	4089195

❖ iFluor™ is a trademark of AAT Bioquest, Inc.

Antigen:	CD34
Immunogen:	Human cell line derived from peripheral leukocytes from a CML patient
Host/Isotype:	Mouse, IgG1,κ
Reactivity:	Human
Purity:	>90% pure tested via polyacrylamide gel electrophoresis (PAGE)
Formulation:	PBS, pH7.2, 0.09% NaN ₃ and 0.2% (w/v) BSA
Storage:	Store at 2-8°C and protected from prolonged exposure to light. Do not freeze.
Applications:	Flow Cytometry.

Antigen Information

The clone 4H11, a mouse monoclonal antibody recognizes a human ~115 KDa monomeric transmembrane phosphoglycoprotein commonly known as CD34. It is expressed mostly on hematopoietic progenitors and pluripotent stem cells, and in multitude of other nonhematopoietic cell types including muscle satellite cells, corneal keratocytes, interstitial cells, epithelial progenitors, and vascular endothelial progenitors.

The anti-CD34 binding affinity has been assigned to three classes (class I, II or III) based on their neuraminidase and glycoprotease sensitivity response and 4H11 is considered as class III antibody. In clinical practice, CD34 expression is evaluated to ensure rapid engraftment in BM transplants and can also be used as a selective marker in cell sorting to enrich a population of immature hematopoietic cells.

References

1. Civin, C.I., et al. 1984, *J. Immunol.* 133: 157-165.
2. Lanza F., et al. 2001, *J. Biol Regul Homeost Agents* 15: 1-13.
3. Sidney, L.E., et al. 2014, *Stem Cells* 32(6): 1380-1389.
4. Berardi, A.C., et al. 1995, *Science.* 267: 104-8.

*Analyte Specific Reagent. The analytical and performance characteristics of this ASR product are not established.