

cFluor® BYG575 Anti-Human CD34 (4H11)

PRODUCT DETAILS	
Catalog Number:	R7-20279 (100 tests)
	R7-20280 (25 tests)
	R7-20436 (25 tests)
Reactivity:	Human
Clone:	4H11
Format:	cFluor [®] BYG575
Isotype:	Mouse IgG1, κ
Test Dilution:	5 μL / test
Application:	Flow cytometry
Formulation:	Phosphate-buffered saline, pH 7.2, containing 0.09% sodium azide and 0.2%
	BSA (BSA Country of Origin USA)
Storage:	2-8°C and protected from light.
	Do not freeze

PRODUCT DESCRIPTION

The 4H11 monoclonal antibody reacts with human CD34, also known as mucosialin. CD34 belongs to a protein family which also includes endoglycan and podocalyxin. Members of this family are single pass transmembrane proteins with a heavily glycosylated extracellular and N-terminal mucin domain. CD34 was first identified as an antigen expressed on hematopoietic progenitors, and has since been extensively used as a marker to isolate cells capable of hematopoietic cell engraftment. In spite of this, the function of CD34 remains unresolved. In addition to expression on hematopoietic progenitors, CD34 is expressed on some populations of mesenchymal stem cells, tumor cell lines, and by vascular endothelia in the adult. Epitopes of CD34 have been assigned to three classes (class I, II or III) based on their differential sensitivity to enzymatic cleavage by neuraminidase, chymopapain, or O-glycoprotease. According to this analysis, the 4H11 antibody belongs to class III, indicating that it reacts with a protein epitope. The antibody was conjugated to a fluorophore and purified by chromatography.

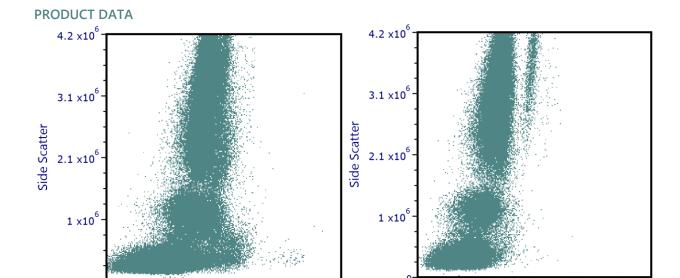
RECOMMENDED USAGE

Each lot of this antibody is quality control tested using flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 μ L per 1 million cells in a staining volume of 100 μ L. If whole blood is analyzed, then use 5 μ L per 100 μ L. It is recommended that users titrate the antibody to obtain the optimal result for their specific application.

Please briefly centrifuge the reagent vial before use.

Use appropriate personal protective equipment per the product safety data sheet when using this product.





Human peripheral blood was stained with cFluor® BYG575 Anti-Human CD34 (clone 4H11) (left) or cFluor® BYG575 mouse IgG1, κ isotype control (right).

10⁶

10⁵

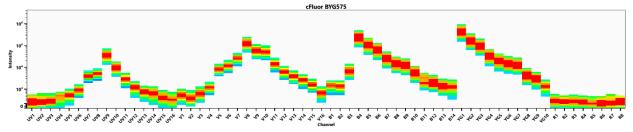
-10²

10³

104

Mouse IgG1, k isotype control

10⁵



Spectral signature of cFluor® BYG575 from a Cytek® Aurora 5 laser system equipped with 355, 405, 488, 561 and 640 nm lasers using CytekAssaySetting.

REFERENCES

- 1. Schlossman SF, et al. 1995. Leukocyte Typing V: White Cell Differentiation Antigen.
- 2. Felschow DM, et al. 2001. Blood 97:3768.

10³

10⁴

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- 3. Rudin CE, et al. 1997. Br. J. Haematol. 97:488.
- 4. Yoshino N, et al. 2000. Exp. Anim. (Tokyo) 49:97.

For Research Use Only. Not intended for use in diagnostic procedures.