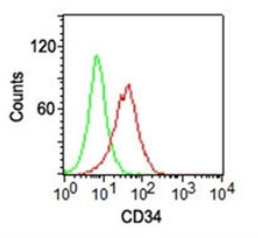
CD34 Antibody for FACS PE / Bright Signal Detection Antibody [clone ICO-115] (V2065PE)

Catalog No.	Formulation	Size
V2065PE-100T	500 ul at 0.1 mg/ml with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 Tests

Citations (5)

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human and Rat. Other species not known.
Format	PE Conjugate
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	ICO-115
Purity	Protein G affinity chromatography
Gene ID	947 (Human)
Localization	Cell surface
Applications	Flow Cytometry: 5ul per test per one million cells in 0.1ml (or 5ul per 100ul of whole blood) Immunofluorescence: 1:50-1:100
Limitations	This CD34 Antibody for FACS PE / Bright Signal Detection Antibody is available for research use only.



CD34 Antibody for FACS PE. Flow cytometry analysis of CD34 surface expression in human KG-1 cells using a Bright Signal Detection Antibody, clone ICO-115 conjugated to PE, shows a clear right-shifted population (red) compared to isotype control (green), indicating enhanced fluorescence intensity and specific detection of CD34-positive cells. The strong signal and distinct population separation support accurate gating of leukemia-associated blast populations and highlight the antibodyâ€™s suitability for detecting low-abundance or dim CD34 expression in flow cytometry.

Description

Cluster of Differentiation 34 (CD34) is a transmembrane glycoprotein expressed on hematopoietic stem and progenitor cells and serves as a key marker of early hematopoietic populations. It plays an important role in cell adhesion and

migration within stem cell niches. CD34 Antibody for FACS is widely used for detecting rare CD34-positive populations, where signal intensity is critical for accurate identification. Conjugation to phycoerythrin (PE), a high-quantum-yield fluorophore, provides exceptionally bright fluorescence, enabling enhanced detection sensitivity in flow cytometry.

CD34 antibody, also known as leukemia stem cell marker antibody or progenitor cell detection antibody, is frequently used to identify immature cell populations in bone marrow, peripheral blood, and disease samples. In many experimental settings, CD34 expression may be low or heterogeneous, making bright fluorophores essential for resolving dim-positive populations. PE conjugation significantly improves signal-to-noise ratio, allowing clear separation of CD34-positive cells from background and enabling confident gating of rare events.

This CD34 Antibody for FACS is uniquely positioned for bright signal detection of low-abundance CD34-positive cells, including early hematopoietic progenitors and leukemia-associated blast populations. The increased fluorescence intensity provided by PE enhances detection of weakly expressing cells and reduces the risk of underestimating CD34-positive fractions in heterogeneous samples. This is particularly important in applications involving rare cell detection or limited sample input.

Clone ICO-115 conjugated to PE delivers strong and specific surface staining with high fluorescence output, producing well-resolved positive populations in flow cytometry histograms and dot plots. The enhanced brightness facilitates early gating strategies and improves discrimination between closely spaced populations, especially in multicolor panels where marker expression levels vary.

In multiparameter flow cytometry, PE-conjugated antibodies are often selected for markers requiring maximum sensitivity, particularly when detecting rare or dim populations. CD34 detection using PE is advantageous in panels focused on stem cell isolation, leukemia analysis, and progenitor cell quantification, where accurate identification of low-frequency events is essential.

Overall, CD34 Antibody for FACS with PE conjugation provides high-intensity signal, improved resolution of dim populations, and enhanced detection sensitivity, making it highly effective for identifying rare CD34-positive cells and supporting high-performance flow cytometry analysis.

This antibody is part of our CD34 antibody collection, supporting research into stem cell biology, endothelial markers, and tumor angiogenesis.

Application Notes

The concentration stated for each application is a general starting point. Variations in protocols, secondaries and substrates may require the CD34 Antibody for FACS PE / Bright Signal Detection Antibody to be titered up or down for optimal performance.

Immunogen

Blast cells from a chronic myeloid leukemia patient were used as the immunogen for this CD34 antibody.

Storage

Store the CD34 antibody at 2-8oC. Conjugate is light sensitive, store in the dark.

Alternate Names

CD34 PE conjugated antibody, CD34 bright fluorophore antibody, CD34 flow cytometry PE antibody, CD34 high sensitivity FACS antibody, CD34 PE stem cell marker antibody

References (2)

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