

## TECHNICAL DATA SHEET

### CyFlow™ CD34 PE-Cy5 Anti-Hu; Clone 581

**REF** AG891077

**For Research Use Only.**  
**Not for use in diagnostic or therapeutic procedures.**

### Specifications

|                                    |                           |
|------------------------------------|---------------------------|
| <b>Antigen</b>                     | CD34                      |
| <b>Alternative Names</b>           | —                         |
| <b>Clone</b>                       | 581                       |
| <b>Clonality</b>                   | monoclonal                |
| <b>Format</b>                      | PE-Cy5                    |
| <b>Host / Isotype</b>              | Mouse / IgG1              |
| <b>Species Reactivity</b>          | Human, Non-Human Primates |
| <b>Negative Species Reactivity</b> | —                         |
| <b>Quantity</b>                    | 100 tests                 |
| <b>Immunogen</b>                   | < no data >               |

### Specificity

The mouse monoclonal antibody 581 recognizes CD34 antigen, a 110-115 kDa monomeric transmembrane phosphoglycoprotein expressed on hematopoietic progenitors cells and on the most

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pluripotential stem cells; it is gradually lost on progenitor cells. The antibody recognizes the class III CD34 epitope resistant to neuraminidase, chymopapain and glycoprotease.

## Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 4 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

## Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

## Storage and Stability

|                  |                                                                               |
|------------------|-------------------------------------------------------------------------------|
| <b>Storage</b>   | Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze. |
| <b>Stability</b> | Do not use after expiration date stamped on vial label.                       |

## Background Information

CD34 (Mucosialin) is a highly glycosylated monomeric 111-115 kDa surface protein, which is present on many stem cell populations. It is a well established stem cell marker, though its expression on human hematopoietic stem cells is reversible. CD34 probably serves as a surface receptor that undergoes receptor-mediated endocytosis and regulates adhesion, differentiation and proliferation of hematopoietic stem cells and other progenitors. CD34 expression is likely to represent a specific state of hematopoietic development that may have altered adhering properties with expanding and differentiating capabilities in both in vitro and in vivo conditions.

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The Safety Data Sheet for this product is available at [www.sysmex-partec.com/services](http://www.sysmex-partec.com/services).

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