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# Product Data Sheet

## PE/Dazzle™ 594 anti-human CD133

**Catalog # / Size:** 2570560 / 100 tests
2570555 / 25 tests

**Clone:** S16016E

**Isotype:** Mouse IgG2a, κ

**Immunogen:** Human CD133 transfectants

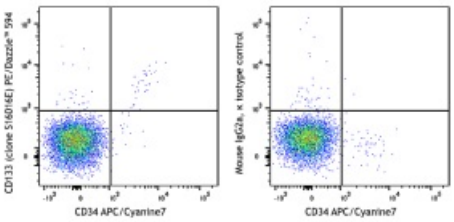
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)

**Workshop Number:** IV P38

**Concentration:** Lot-specific




Human peripheral blood mononucleus cells were stained with CD34 APC/Cyanine7 and CD133 (clone S16016E) PE/Dazzle™ 594 (left) or mouse IgG2a, κ PE/Dazzle™ 594 isotype control (right). Data shown was gated on the $CD45^+$ and $CD14^-$ lymphocyte population.

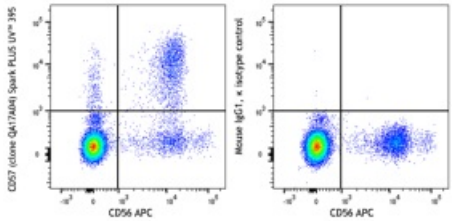
## Applications:

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

**Application Notes:** In-house testing suggests that clone S16016E blocks clone 293C3 but not clone 7 that are also raised against human CD133.




Human peripheral blood lymphocytes were stained with anti-human CD56 (clone HCD56) APC and anti-human CD57 recombinant (clone QA17A04) Spark PLUS UV™ 395 (left) or mouse IgG1, κ Spark PLUS UV™ 395 isotype control (right).

**Application References:**


1. Knapp W, *et al.* 1989. Leucocyte Typing IV. Oxford University Press. New York.
2. McCarty OJT, *et al.* 2000. *Blood* 96:1789.
3. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
4. Zhi L *et al*. 2013. *PLoS One*. 8:e79869. (IHC)



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**Description:** CD133, also known as Prominin-1 and AC133 antigen, is a 120 kD pentaspan glycoprotein with 5 transmembrane domains. CD133 was initially described as a surface antigen specific for human hematopoietic stem cells and as a marker for murine neuroepithelial cells and some embryonic epithelia. Later on, CD133 was found on other stem cells, including endothelial progenitor cells, glioblastomas, neuronal, and glial stem cells. In addition to stem cells for normal tissue, CD133 was found on cancer cells, such as some leukemia cells and brain tumor cells. Although the biological function of CD133 is not completely understood, CD133 has been extensively used as a stem cell marker for normal and cancerous tissues.

**Antigen References:**


1. Yin AH, *et al.* 1997. *Blood.* 90:5002.
2. Miraglia S, *et al.* 1997. *Blood.* 90:5013.
3. Bühring HJ, *et al.* 1999. *Ann. NY Acad. Sci.* 872:25.



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