SONY

# Product Data Sheet

## APC anti-mouse CD133

**Catalog # / Size:** 1306040 / 100 µg
1306035 / 25 µg

**Clone:** 315-2C11

**Isotype:** Rat IgG2a, λ

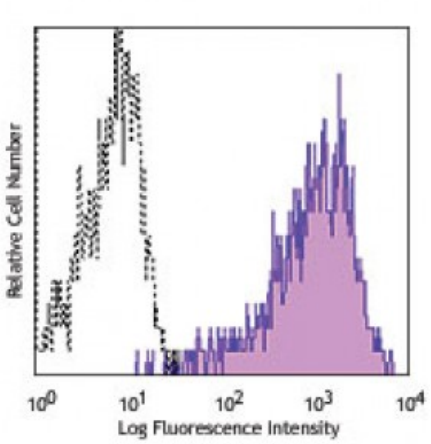
**Immunogen:** CD133-expressing-GFP-RBL2H3 plus CFA as adjuvant.

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.2

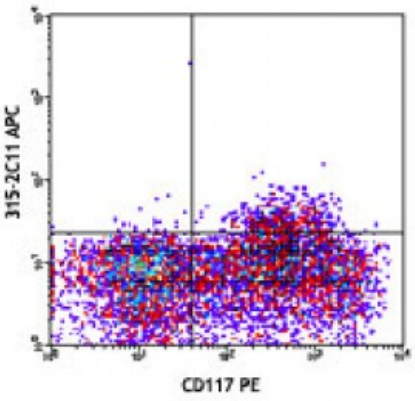



Mouse CD133 transfected cells were stained with CD133 (clone 315-2C11) APC (filled histogram) or rat IgG2a, κ APC isotype control (open histogram).

## 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 ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.




C57BL/6 mouse bone marrow cells were stained with FITC-conjugated Ly-6G, CD3 and B220, CD117 PE, and CD133 (clone 315-2C11) APC (middle) or rat IgG2a, κ APC (bottom) isotype control. Data was gated on Ly-6G/CD3/B220 negative cell population.

**Application References:**
1. Zhang Y, *et al.* 2012. *Diabetes.* 61:2114. PubMed

**Description:** CD133 (also known as prominin-1 and AC133) is a 120 kD pentaspan glycoprotein with 5 transmembrane domains which localize to cellular protrusions. 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 hematopoietic stem cells, CD133 was found on cancer cells, such as some leukemia cells and brain tumor cells. It also has been detected at low levels in the

kidney, pancreas, placenta, and fetal liver tissue. 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. Singh SK, *et al.* 2004. *Nature* 18:396.
2. Falini B, *et al.* 2005. *New Engl. J. Med.* 352:254.
3. Bonanno G, *et al.* 2004. *Transfusion* 44:1087.
4. Gaipa G, *et al.* 2002.