Brilliant Violet 421™ anti-mouse CD133

Catalog # / Size: 1306065 / 50 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 Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and

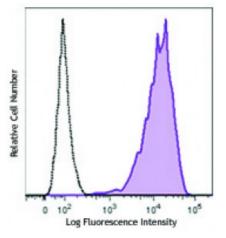
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

Concentration: 0.2



Mouse CD133 transfected cells were stained with CD133 (clone 315-2C11) Brilliant Violet 421™ (filled histogram) or rat IgG2a, κ Brilliant Violet 421™ isotype control (open histogram).

Applications:

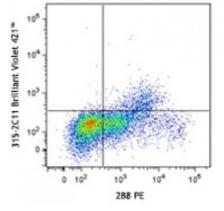
Applications: Flow Cytometry

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 ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen

Group Ltd.



C57BL/6 mouse bone marrow cells were stained with CD117 PE and CD133 (clone 315-2C11) Brilliant Violet 421™ (top) or rat IgG2a, κ Brilliant Violet 421™ (bottom) isotype control.

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.