

**Brilliant Violet 421™ anti-mouse CD138 (Syndecan-1)**

**Catalog # / Size:** 1312540 / 500 µl  
 1312535 / 125 µl  
 1312615 / 50 µg

**Clone:** 281-2

**Isotype:** Rat IgG2a, κ

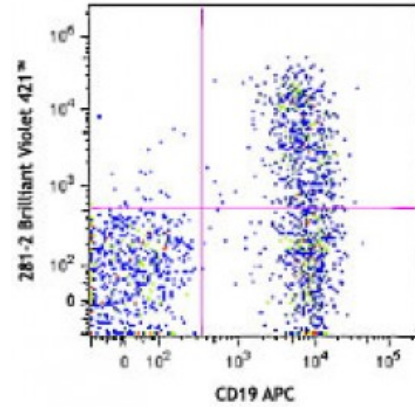
**Immunogen:** Mouse mammary gland epithelial cell line NMuMG

**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:** microg sizes: 0.2 mg/ml  
 microL sizes: lot-specific

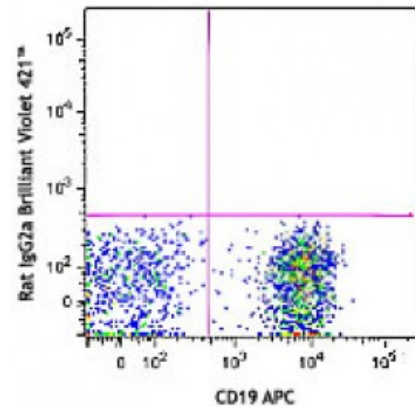


C57BL/6 mouse bone marrow cells were stained with CD19 APC and CD138 (clone 281-2) Brilliant Violet 421™ (top) or rat IgG2a, κ Brilliant Violet 421™ isotype control (bottom). Data shown is from gated on lymphoid cell population.

**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 using the microg size, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. For flow cytometric staining using the microL sizes, the suggested use of this reagent is ≤5 microL per million cells or 5 microL per 100 microL of whole blood. 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.

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resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunohistochemical staining of frozen tissue<sup>3</sup> and formalin-fixed paraffin embedded tissue<sup>4</sup> and immunofluorescent staining<sup>2,3</sup>.

**Application References:**

1. Jalkanen M, *et al.* 1985. *J. Cell. Biol.* 101:976. (FC)
2. Miettinen H, *et al.* 1994. *J. Cell. Sci.* 107:1571. (IF)
3. Li Q, *et al.* 2002. *Cell* 111:635. (IF, IHC)
4. McCarthy BA, *et al.* 2012. *BMC Cancer.* 12:203. (IHC)
5. Huang L, *et al.* 2015. *J Immunol.* 194:283. [PubMed](#)

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**Description:** CD138, a member of the syndecan protein family, is a type I integral membrane heparin sulfate proteoglycan also known as Syndecan-1. Syndecan-1 participates in cell proliferation, cell migration, and cell matrix adhesion via interaction with collagen, fibronectin, and other soluble molecules (such as FGF-basic). It is expressed on normal and malignant plasma cells, pre-B cells, mesenchymal cells, epithelial cells, and endothelial cells.

**Antigen References:**

1. Zong F, *et al.* 2011. *PLoS ONE* 6:e14816.
2. Yamashita Y, *et al.* 1999. *J. Immunol.* 162:5940.
3. Sanderson RD, *et al.* 1989. *Cell. Regul.* 1:27.