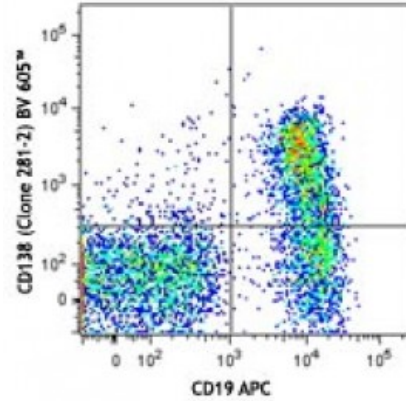


**Brilliant Violet 605™ anti-mouse CD138 (Syndecan-1)**

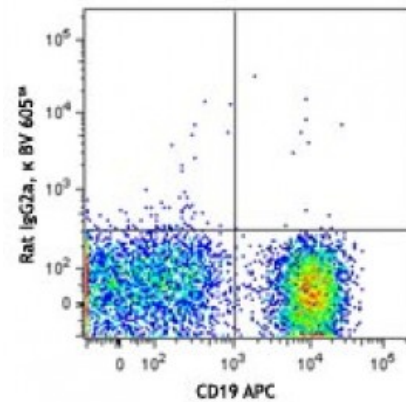
**Catalog # / Size:** 1312580 / 500 µl  
 1312575 / 125 µl  
 1312655 / 50 µg  
**Clone:** 281-2  
**Isotype:** Rat IgG2a, κ  
**Immunogen:** Mouse mammary gland epithelial cell line NMuMG  
**Reactivity:** Mouse  
**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 605™ and unconjugated antibody.  
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).  
**Concentration:** Lot-specific



C57BL/6 mouse bone marrow cells were stained with CD19 APC and CD138 (clone 281-2) Brilliant Violet 605™ (top) or rat IgG2a, κ Brilliant Violet 605™ isotype control (bottom).

**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 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 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ is a trademark of Sirigen Group Ltd.

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the purchased product for research purposes only. This product may not be 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)

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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.