

**PE anti-mouse CD138 (Syndecan-1)**

**Catalog # / Size:** 1312520 / 200 µg  
1312515 / 25 µg

**Clone:** 281-2

**Isotype:** Rat IgG2a, κ

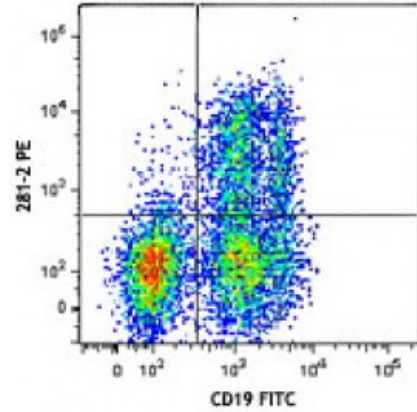
**Immunogen:** Mouse mammary gland epithelial cell line NMuMG

**Reactivity:** Mouse

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

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

**Concentration:** 0.2



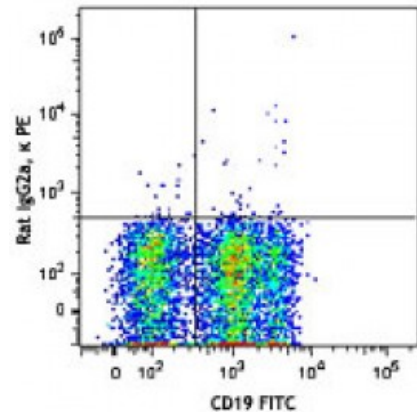
C57BL/6 mouse bone marrow cells were stained with CD19 FITC and CD138 (clone 281-2) PE (top) or rat IgG2a, κ PE isotype control (bottom). Data shown is from gated on myeloid population.

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

**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. Kim Yu, *et al.* 2015. *PLoS One.* 10:120294. [PubMed](#)

**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.