

**Alexa Fluor® 647 anti-human CD138 (Syndecan-1)**

**Catalog # / Size:** 2382615 / 25 tests  
2382620 / 100 tests

**Clone:** MI15

**Isotype:** Mouse IgG1, κ

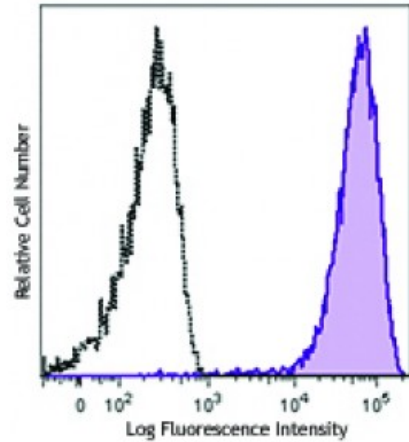
**Immunogen:** A mixture of U266 and XG-1 human myeloma cell lines.

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Concentration:** Lot-specific



Human myeloma cell line U266 was stained with CD138 (clone MI15) Alexa Fluor® 647 (filled histogram) or mouse IgG1, κ Alexa Fluor® 647 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 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.

\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.

**Application Notes:** The epitope recognized by MI15 is found within the ectodomain of the CD138 core protein. It has been reported that MI15 blocks the binding of clone B-B4 but not clone DL-101 by flow cytometric analysis. Clones DL-101 and MI15 exhibit differential staining patterns on *in vitro* generated plasma cells and some CD138<sup>+</sup> cell lines.<sup>4</sup>

Additional reported applications for the relevant formats include: immunofluorescent staining<sup>1</sup>, Western blotting<sup>2</sup>, and immunohistochemical staining of formalin-fixed paraffin-embedded frozen tissue sections<sup>3</sup>.

- Application References:**
1. Costes V, *et al.* 1999. *Hum. Pathol.* 30:1405. (IF)
  2. Gattei V, *et al.* 1999. *Br. J. Haematol.* 104:152. (WB)
  3. Bologna-Molina R, *et al.* 2008. *Oral Oncol.* 44:805. (IHC)
  4. Itoua MR, *et al.* 2014. *Biomed. Res. Int.* 2014:536482.

**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 human plasma cells, pre-B cells, epithelial cells, and endothelial cells, but not on mature circulating B-lymphocytes. It is also expressed on some non-hematopoietic cells, including embryonic mesenchymal

cells, vascular smooth muscle cells, endothelial cells, and neural cells.

**Antigen**  
**References:**

1. Sanderson RD, *et al.* 1992. *Cell. Regul.* 1:27.
2. Zola H, *et al.* 2007. *Leukocyte and Stromal Cell Molecules: The CD Markers.* Wiley-Liss A John Wiley & Sons Inc, Publication.