## PerCP/Cy5.5 anti-human CD138 (Syndecan-1)

Catalog # / Size: 2382550 / 100 tests

2382545 / 25 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 PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated

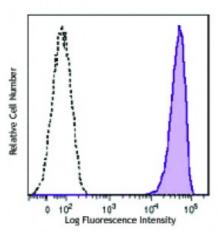
antibody.

**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) PerCP/Cy5.5 (filled histogram) or mouse IgG1, κ PerCP/Cy5.5 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.

\* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 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.4

Additional reported applications for the relevant formats include: immunofluorescent staining1, Western blotting2, and immunohistochemical staining of formalin-fixed paraffin-embedded frozen tissue sections3.

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.