Brilliant Violet 605™ anti-human CD138 (Syndecan-1)

Catalog # / Size: 2382595 / 25 tests

2382600 / 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 Brilliant Violet $605^{\, \text{\tiny M}}$ under optimal conditions. The solution is free of unconjugated Brilliant Violet $605^{\, \text{\tiny M}}$ and

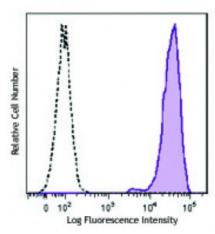
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and BSA

(origin USA).

Concentration: Lot-specific



Human myeloma cell line U266 was stained with CD138 (clone MI15) Brilliant Violet 605™ (filled histogram) or mouse IgG1, κ Brilliant Violet 605™ 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.

Brilliant Violet 605^{TM} 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^{TM} is a trademark of Sirigen Group Ltd.

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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⁺ 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.