### Anti-Human CD138 (Syndecan-1) Antibody, Clone MI15, APC

# **Antibodies**

Mouse monoclonal IgG1 antibody against human, rhesus, cynomolgus CD138 (syndecan-1), APC-conjugated

Catalog #60003AZ #60003AZ.1 100 Tests 5 μL/test 25 Tests 5 μL/test



Scientists Helping Scientists<sup>™</sup> | www.stemcell.com

TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713 INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM FOR GLOBAL CONTACT DETAILS VISIT OUR WERSITE

# **Product Description**

The MI15 antibody reacts with an extracellular epitope on CD138 (Syndecan-1), an ~85 - 95 kDa type 1 transmembrane glycoprotein expressed on the surface of pre-B cells, immature B cells, and normal and malignant plasma cells (but not mature circulating B cells), as well as on non-hematopoietic cells such as embryonic mesenchymal cells, endothelial, epithelial and neural cells. CD138 expression is used as a diagnostic marker for several types of tumors. CD138 is thought to act primarily as a receptor which modulates cell proliferation, cell migration and cell-matrix associations by linking the extracellular matrix to the cytoskeleton. Heparin sulfate and chondroitin sulfate moieties attached to CD138 associate with several proteins, including collagens, fibronectin, tenascin, thrombospondin and certain cytokines. The MI15 antibody recognizes a different epitope to that of the clone DL-101 anti-CD138 antibody but blocks binding of clone B-B4.

Target Antigen Name: CD138 (Syndecan-1)

Alternative Names: B-B4, SDC1, syndecan-1

Gene ID: 6382

Species Reactivity: Human, Rhesus, Cynomolgus (IHC)

Host Species: Mouse
Clonality: Monoclonal
Clone: MI15

Cione: IVII 15

Isotype: IgG1, kappa

Immunogen: A combination of human-derived U266 and XG-1 myeloma cell lines

Conjugate: APC

# **Applications**

Verified: FC Reported: FC

Special Applications: This antibody clone has been verified for purity assessments of cells isolated with EasySep™ Human CD138

Positive Selection Kit (Catalog #18357) and EasySep™ Human Whole Blood CD138 Positive Selection Kit

(Catalog #18387).

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

# **Properties**

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) bovine serum albumin

Purification: The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The

solution is free of unconjugated APC and unconjugated antibody.

Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to

light. For product expiry date, please contact techsupport@stemcell.com.

Directions for Use: For flow cytometry the suggested use of this antibody is 5 µL per 1 x 10^6 cells in 100 µL volume or per

100 µL of whole blood. It is recommended that the antibody be titrated for optimal performance for each

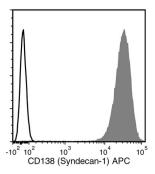
application.

#### Anti-Human CD138 (Syndecan-1) Antibody, Clone MI15, APC

# **Antibodies**



### Data



Flow cytometry analysis of human U266 myeloma cells labeled with Anti-Human CD138 (Syndecan-1) Antibody, Clone MI15, APC (filled histogram) or a mouse IgG1, kappa APC isotype control antibody (open histogram).

## **Related Products**

For a complete list of antibodies, including other conjugates, sizes and clones, as well as related products available from STEMCELL Technologies, please visit our website at www.stemcell.com/antibodies or contact us at techsupport@stemcell.com.

### References

- 1. Kawano Y et al. (2013) Hypoxia reduces CD138 expression and induces an immature and stem cell-like transcriptional program in myeloma cells. Int J Oncol 43(6): 1809–16. (FC)
- 2. Phuah JY et al. (2012) Activated B cells in the granulomas of nonhuman primates infected with Mycobacterium tuberculosis. Am J Pathol 181(2): 508–14. (IHC)
- 3. Erikson E et al. (2011) In vivo expression profile of the antiviral restriction factor and tumor-targeting antigen CD317/BST-2/HM1.24/tetherin in humans. Proc Natl Acad Sci U S A 108(33): 13688–93. (FC, IF, IHC)
- 4. Beauvais DM et al. (2009) Syndecan-1 regulates alphavbeta3 and alphavbeta5 integrin activation during angiogenesis and is blocked by synstatin, a novel peptide inhibitor. J Exp Med 206(3): 691–705. (FC, IF, IHC, IP)
- 5. Bologna-Molina R et al. (2008) Syndecan-1 (CD138) and Ki-67 expression in different subtypes of ameloblastomas. Oral Oncol 44(8): 805–11. (IHC)
- 6. Götte M et al. (2007) An expression signature of syndecan-1 (CD138), E-cadherin and c-met is associated with factors of angiogenesis and lymphangiogenesis in ductal breast carcinoma in situ. Breast Cancer Res 9(1): R8. (ICC, IF, IHC)
- 7. Colomo L et al. (2003) Clinical impact of the differentiation profile assessed by immunophenotyping in patients with diffuse large B-cell lymphoma. Blood 101(1): 78–84. (IHC)
- 8. Seftalioglu A & Karakus S. (2003) Syndecan-1/CD138 expression in normal myeloid, acute lymphoblastic and myeloblastic leukemia cells. Acta Histochem 105(3): 213–21. (IHC, Electron microscopy)
- 9. Costes V et al. (1999) The Mi15 monoclonal antibody (anti-syndecan-1) is a reliable marker for quantifying plasma cells in paraffin-embedded bone marrow biopsy specimens. Hum Pathol 30(12): 1405–11. (IHC)
- 10. Gattei V et al. (1999) Characterization of anti-CD138 monoclonal antibodies as tools for investigating the molecular polymorphism of syndecan-1 in human lymphoma cells. Br J Haematol 104(1): 152–62. (FC, WB)
- 11. Wijdenes J. (1997) BC29: CD138 (syndecan-1) workshop panel report. In T. Kishimoto, ed. Leukocyte Typing VI: White cell differentiation antigens. New York: Garland Publishing Inc, pp. 249–52. (FC)

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485. PRODUCTS ARE FOR RESEARCH USE ONLY AND NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES UNLESS OTHERWISE STATED.

Copyright © 2016 by STEMCELL Technologies Inc. All rights reserved including graphics and images. STEMCELL Technologies & Design, STEMCELL Shield Design, Scientists Helping Scientists and EasySep are trademarks of STEMCELL Technologies Inc. All other trademarks are the property of their respective holders. While STEMCELL has made all reasonable efforts to ensure that the information provided by STEMCELL and its suppliers is correct, it makes no warranties or representations as to the accuracy or completeness of such information.