

Antibodies

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

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



Scientists Helping Scientists™ | 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 WEBSITE

Catalog #60003FI
#60003FI.1

100 tests 5 µL/test
25 tests 5 µL/test

FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.

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, Cotton-topped Tamarin |
| Host Species: | Mouse |
| Clonality: | Monoclonal |
| Clone: | MI15 |
| Isotype: | IgG1, kappa |
| Immunogen: | A combination of human-derived U266 and XG-1 myeloma cell lines |
| Conjugate: | FITC |

Applications

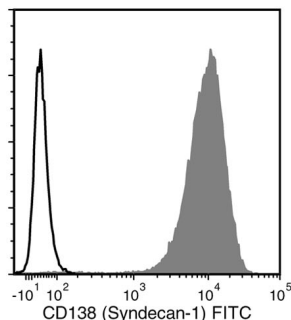
| | |
|-----------------------|--|
| Verified: | FC |
| Reported: | FC |
| Special Applications: | This antibody clone has been verified for purity assessments of cells isolated with EasySep™ Human CD138 Positive Selection Kit (Catalog #18357) and EasySep™ Human Whole Blood CD138 Positive Selection Kit (Catalog #18387). |

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IP: Immunoprecipitation; 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 FITC under optimal conditions. The solution is free of unconjugated FITC 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. |

Data



Flow cytometry analysis of human U266 myeloma cells labeled with Anti-Human CD138 (Syndecan-1) Antibody, Clone MI15, FITC (filled histogram) or a mouse IgG1, kappa FITC 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. Wijdenes J, et al. BC29: CD138 (syndecan-1) workshop panel report. In: Kishimoto T, et al., Eds. Leukocyte Typing VI: White cell differentiation antigens. Garland Publishing Inc., New York, pp. 249-52, 1997 (FC)
2. Costes V, et al. 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, 1999 (IHC)
3. Gattei V, et al. 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, 1999 (FC, WB)
4. Colomo L, et al. Clinical impact of the differentiation profile assessed by immunophenotyping in patients with diffuse large B-cell lymphoma. Blood 101: 78-84, 2003 (IHC)
5. Seftalioglu A, Karakus S. Syndecan-1/CD138 expression in normal myeloid, acute lymphoblastic and myeloblastic leukemia cells. Acta Histochem 105(3): 213-21, 2003 (IHC/Electron Microscopy)
6. Götte M, et al. An expression signature of syndecan1 (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, 2007 (ICC, IF, IHC)
7. Bologna-Molina R, et al. Syndecan-1 (CD138) and Ki-67 expression in different subtypes of ameloblastomas. Oral Oncol 44(8): 805-11, 2008 (IHC)
8. Beauvais DM, et al. 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, 2009 (FC, IF, IHC, IP)
9. Erikson E, et al. 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 USA 108(33): 13688-93, 2011 (FC, IF, IHC)
10. Kawano Y, et al. Hypoxia reduces CD138 expression and induces an immature and stem cell-like transcriptional program in myeloma cells. Int J Oncol 43(6): 1809-16, 2013 (FC)

Copyright © 2014 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.

STEMCELL TECHNOLOGIES INC.'S QUALITY MANAGEMENT SYSTEM IS CERTIFIED TO ISO 13485 MEDICAL DEVICE STANDARDS.