

PE/Fire™ 810 anti-human CD138 (Syndecan-1) Antibody

| | |
|--------------------------|--|
| Catalog# / Size | 356555 / 25 tests |
| Clone | MI15 |
| Regulatory Status | RUO |
| Workshop | HCDM listed |
| Other Names | B-B4 |
| Isotype | Mouse IgG1, κ |
| 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. |

Product Details

| | |
|-------------------------------|---|
| Verified Reactivity | Human |
| Antibody Type | Monoclonal |
| Host Species | Mouse |
| Immunogen | A mixture of U266 and XG-1 human myeloma cell lines. |
| Formulation | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA) |
| Preparation | The antibody was purified by affinity chromatography and conjugated with PE/Fire™ 810 under optimal conditions. |
| Concentration | Lot-specific (to obtain lot-specific concentration and expiration, please enter the lot number in our Certificate of Analysis online tool.) |
| Storage & Handling | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze. |
| Application | FC - Quality tested |
| 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 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. * PE/Fire™ 810 has a maximum excitation of 488/561 nm and a maximum emission of 810 nm. Excessive exposure to light, and commonly used fixation, permeabilization buffers can affect PE/Fire™ 810 fluorescence signal intensity and spread. Please keep conjugates protected from light exposure. For more information and representative data, visit our Fire Dyes page. |
| Excitation Laser | Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 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 <i>in vitro</i> generated plasma cells and some CD138 ⁺ cell lines. ⁴ Additional reported applications for the relevant formats include: immunofluorescent staining ¹ , |

Western blotting², immunohistochemical staining of formalin-fixed paraffin-embedded frozen tissue sections³, and spatial biology (IBEX)^{5,6}.

Application References

(PubMed link indicates BioLegend citation)

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.
5. Radtke AJ, *et al.* 2020. *Proc Natl Acad Sci USA.* 117:33455-33465. (SB) [PubMed](#)
6. Radtke AJ, *et al.* 2022. *Nat Protoc.* 17:378-401. (SB) [PubMed](#)

RRID AB_3698999 (BioLegend Cat. No. 356555)

Antigen Details

| | |
|---------------------------|---|
| Structure | 100-200 kD type I integral transmembrane glycoprotein |
| Distribution | Plasma cells, pre-B cells, epithelial cells, endothelial cells |
| Function | Adhesion, controls cell morphology, regulates cell growth |
| Ligand/Receptor | FGFb, collagen, fibronectin |
| Cell Type | B cells, Endothelial cells, Epithelial cells, Plasma cells |
| Biology Area | Cell Adhesion, Cell Biology, Cell Motility/Cytoskeleton/Structure, Immunology, Neuroscience, Synaptic Biology |
| Molecular Family | Adhesion Molecules, CD Molecules |
| Antigen References | <ol style="list-style-type: none">1. Sanderson RD, <i>et al.</i> 1992. <i>Cell. Regul.</i> 1:27.2. Zola H, <i>et al.</i> 2007. <i>Leukocyte and Stromal Cell Molecules: The CD Markers.</i> Wiley-Liss A John Wiley & Sons Inc, Publication. |
| Gene ID | 6382 |

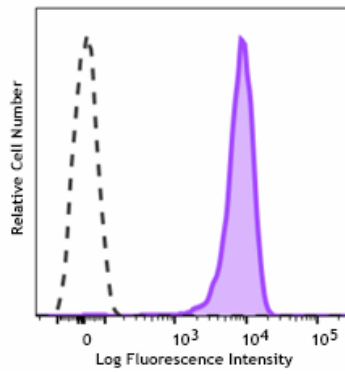
Related Protocols

- [Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PE anti-human CD138 (Syndecan-1), Purified anti-human CD138 (Syndecan-1), APC anti-human CD138 (Syndecan-1), FITC anti-human CD138 (Syndecan-1), PerCP/Cyanine5.5 anti-human CD138 (Syndecan-1), Alexa Fluor® 700 anti-human CD138 (Syndecan-1), PE/Cyanine7 anti-human CD138 (Syndecan-1), Brilliant Violet 421™ anti-human CD138 (Syndecan-1), Brilliant Violet 510™ anti-human CD138 (Syndecan-1), Brilliant Violet 605™ anti-human CD138 (Syndecan-1), Brilliant Violet 711™ anti-human CD138 (Syndecan-1), Alexa Fluor® 647 anti-human CD138 (Syndecan-1), Alexa Fluor® 594 anti-human CD138 (Syndecan-1), PE/Dazzle™ 594 anti-human CD138 (Syndecan-1), APC/Cyanine7 anti-human CD138 (Syndecan-1), Pacific Blue™ anti-human CD138 (Syndecan-1), TotalSeq™-A0055 anti-human CD138 (Syndecan-1), Brilliant Violet 785™ anti-human CD138 (Syndecan-1), Biotin anti-human CD138 (Syndecan-1), TotalSeq™-C0055 anti-human CD138 (Syndecan-1), APC/Fire™ 750 anti-human CD138 (Syndecan-1), TotalSeq™-B0055 anti-human CD138 (Syndecan-1), PE/Cyanine5 anti-human CD138 (Syndecan-1), TotalSeq™-D0055 anti-human CD138 (Syndecan-1), PE/Fire™ 640 anti-human CD138 (Syndecan-1), Spark Violet™ 500 anti-human CD138 (Syndecan-1), FITC anti-human CD138, PE/Fire™ 700 anti-human CD138 (Syndecan-1), PE/Fire™ 810 anti-human CD138 (Syndecan-1), Spark Violet™ 423 anti-human CD138 (Syndecan-1), Spark Red™ 718 anti-human CD138 (Syndecan-1) (Flexi-Fluor™), GMP FITC anti-human CD138 (Syndecan-1), Brilliant Violet 650™ anti-human CD138 (Syndecan-1), Spark Violet™ 538 anti-human CD138, APC anti-human CD138, Spark Blue™ 550 anti-human CD138 (Syndecan-1) (Flexi-Fluor™), Spark Blue™ 574 anti-human CD138 (Syndecan-1) (Flexi-Fluor™)

Product Data



Human myeloma cell line U266 was stained with anti-human CD138 (Syndecan-1) (clone MI15) PE/Fire™ 810 (filled histogram) or mouse IgG1, κ PE/Fire™ 810 isotype control (open histogram).

For Research Use Only. Not for diagnostic or therapeutic use.

This product is supplied subject to the terms and conditions, including the limited license, located at www.biolegend.com/terms ("Terms") and may be used only as provided in the Terms. Without limiting the foregoing, BioLegend products may not be used for any Commercial Purpose as defined in the Terms, resold in any form, used in manufacturing, or reverse engineered, sequenced, or otherwise studied or used to learn its design or composition without express written approval of BioLegend. Regardless of the information given in this document, user is solely responsible for determining any license requirements necessary for user's intended use and assumes all risk and liability arising from use of the product. BioLegend is not responsible for patent infringement or any other risks or liabilities whatsoever resulting from the use of its products.

BioLegend, the BioLegend logo, and all other trademarks are property of BioLegend, Inc. or their respective owners, and all rights are reserved.

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587