

# Anti-Human CD138 (MI15)



FITC	I38F2-100T	100 test	20 µL/test	2 mg/ml
PE	I38PE2-100T	100 test	20 µL/test	2 mg/ml



## 1. PRODUCT DESCRIPTION

**Clone:** MI15;  
**Isotype:** Mouse IgG1, kappa;  
**Tested application:** flow cytometry;  
**Immunogen:** A mixture of U266 and XG-1 human myeloma cell lines;  
**Species reactivity:** Human;  
**Storage instruction:** store in the dark at 2-8 °C;  
**Storage buffer:** aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN<sub>3</sub>);  
**Recommended usage:** Immunostep's CD138, clone MI15, is a monoclonal antibody intended for the identification and enumeration of plasma cells using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10<sup>6</sup> cells;  
**Presentation:** liquid;  
**Source:** Supernatant proceeding from an in vitro cell culture of a cell hybridoma;  
**Purification:** Affinity chromatography;  
**Other names:** Syndecan-1, SYND1;  
**Gene ID:** 6382;  
**Molecular weight:** 100 - 200 kDa.

## 2. ANTIGEN DETAILS

**Large description:** This antibody reacts with the CD138 antigen, which 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. 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).<sup>(1-4)</sup>

## 3. WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties.

Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price.

## 4. ADDITIONAL INFORMATION

For research use only. Not for diagnostic use.

Not for resale. Immunostep will not be responsible of violations that may occur with the use of this product. Any use of this product other than the specified in this document is strictly prohibited.

Unless otherwise indicated by Immunostep by written authorization, this product is intended for research only and is not to be used for any other purpose, including without limitation, for human or animal diagnostic, therapeutic or commercial purposes.

Please, refer to [www.immunostep.com](http://www.immunostep.com) technical support for more information.

## 5. PROTOCOL

### ■ Direct Immunofluorescence Cell Surface Staining Protocol

1. Transfer 100 µl (10<sup>6</sup> cells/test) of the sample to a 12 x 75 mm polystyrene test tube.
2. Add the suggested volume indicated on the antibody vial to the 12x75 mm cytometer tube.
3. Mix well and incubate in the dark at room temperature at 4 °C for 30 minutes or at room temperature (20-25 °C) for 15 minutes.
4. After the incubation period, add 1,5 ml of an erythrocyte-lysing solution and mix. Incubate at room temperature in the darkness (the blood should be well mixed with the lysing solution).
5. Centrifuge tubes at 540xg for 5 minutes. The supernatant is removed with a Pasteur pipette or with a vacuum pump.
6. Resuspend and wash with 3-5 mL of PBS at 540xg for 5 min.
7. After removing the supernatant and resuspending the cell pellet, add 300 µL of PBS and acquire on the flow cytometer are recorded.
8. Analyse on a flow cytometer or store at 2- 8 °C in the dark until analysis. Samples can be run up to 24 hours after lysis.









### ■ Indirect Immunofluorescence Cell Surface Staining Protocol

1. Transfer 100 µl (10<sup>6</sup> cells/test) of the sample to a 12 x 75 mm polystyrene test tube
2. Add purified reagent according to manufacturer's recommendation and mix gently with a vortex mixer.
3. Incubate in the dark at room temperature at 4 °C for 30 minutes or at room temperature (20-25 °C) for 15 minutes.
4. Add 2 mL 0.01 mol/L PBS (It betters that it containing 2% bovine serum albumin) and resuspend the cells by using a vortex mixer. Centrifuge at 540xg for 5 min in order to remove the McAb not bound to its antigen.
5. Add a secondary conjugated reagent with some fluorochrome and mix. Incubate at room temperature for 15 min in the dark. The absence of light is necessary as the fluorochrome is photoinstability.
6. After the incubation period, add 1,5 ml of an erythrocyte-lysing solution and mix. Incubate at room temperature in the darkness (the blood should be well mixed with the lysing solution). Centrifuge at 540xg for 5 minutes. The supernatant is removed with a Pasteur pipette or with a vacuum pump.
7. Resuspend and a made a final wash with 3-5 mL of PBS at 540xg for 5 min.
8. After removing the supernatant and resuspending the cell pellet, add 300 µL of PBS and acquire on the flow cytometer are recorded.
9. Analyse on a flow cytometer or store at 2- 8 °C in the dark until analysis. Samples can be run up to 24 hours after lysis.

## 6. REFERENCES

1. Gouard S, Pallardy A, Gaschet J, Favre-Chauvet A, Bruchertseifer F, Morgenstern A, et al. Comparative analysis of multiple myeloma treatment by CD138 antigen targeting with bismuth-213 and Melphalan chemotherapy. Nucl Med Biol May;41 Suppl:e30-5.
2. Gaidano G, Ghoghini A, Gattei V, Rossi MF, Cilia AM, Godeas C, et al. Association of Kaposi's sarcoma-associated herpesvirus-positive primary effusion lymphoma with expression of the CD138/syndecan-1 antigen. Blood1997 Dec 15;90(12):4894-900.
3. Cheriyaht V, Glaser KB, Waring JF, Baz R, Hussein MA, Borden EC. GIP3, an IFN-induced survival factor, antagonizes TRAIL-induced apoptosis in human myeloma cells. J Clin Invest2007 Oct;117(10):3107-17.
4. Yang Y, MacLeod V, Dai Y, Khotskaya-Sample Y, Shriver Z, Venkataraman G, et al. The syndecan-1 heparan sulfate proteoglycan is a viable target for myeloma therapy. Blood2007 Sep 15;110(6):2041-8.

## 7. EXPLANATION OF SYMBOLS

	Form
	Catalog reference
	Contains sufficient for > test
	Quantity per test
	Regulatory Status
	Research Use Only
	Concentration
	Manufacturer

## 8. MANUFACTURED BY:

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