

## TECHNICAL DATA SHEET

### CyFlow™ CD138 FITC Anti-Hu; Clone B-A38

**REF** BJ529398

**For Research Use Only.  
Not for use in diagnostic or therapeutic procedures.**

### Specifications

<b>Antigen</b>	CD138
<b>Alternative Names</b>	Syndecan-1, B-B4
<b>Clone</b>	B-A38
<b>Clonality</b>	monoclonal
<b>Format</b>	FITC
<b>Host / Isotype</b>	Mouse / IgG1
<b>Species Reactivity</b>	Human
<b>Negative Species Reactivity</b>	—
<b>Quantity</b>	100 tests
<b>Immunogen</b>	U266 human peripheral blood myeloma cell line

### Specificity

The mouse monoclonal antibody B-A38 recognizes CD138 antigen, a 65-70 kDa heparan sulfate proteoglycan expressed mainly in the epidermis and plasma cells, but also in growth factor-stimulated lymphocytes.

#### Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany  
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: [info@sysmex-partec.com](mailto:info@sysmex-partec.com)

## Application

The reagent is designed for Flow Cytometry analysis of human blood cells. Recommended usage is 20 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.

Other usages may be determined from the scientific literature.

## Storage Buffer

The reagent is provided in stabilizing phosphate buffered saline (PBS) solution, pH ≈7.4, containing 0.1% (w/v) sodium azide.

## Storage and Stability

<b>Storage</b>	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
<b>Stability</b>	Do not use after expiration date stamped on vial label.

## Background Information

CD138 (syndecan 1) is a transmembrane proteoglycan that can bind a variety of cytokines and modulate their activity, as well as the activity of extracellular matrix components and influence many developmental processes. CD138 is expressed mainly in differentiating keratinocytes and is transiently upregulated in all layers of the epidermis upon tissue injury. It is also highly expressed on plasma cells and can be detected even on fibroblasts, vascular smooth muscle cells and endothelial cells. Up-regulation and down-regulation of CD138 on the cell surface often correlates with the gain of cancerous characteristics. Serum levels of the shedded soluble sCD138 are used as a prognostic factor of cancerogenesis.

## References

- Hayashida K, Johnston DR, Goldberger O, Park PW: Syndecan-1 expression in epithelial cells is induced by transforming growth factor beta through a PKA-dependent pathway. J Biol Chem. 2006 Aug 25; 281(34):24365-74. < PMID: 16807246 >
- Manakil JF, Seymour GJ, Bartold PM: Effect of cytokine and antigen stimulation on peripheral blood lymphocyte syndecan-1 expression. Oral Microbiol Immunol. 2007 Aug; 22(4):272-6. < PMID: 17600540 >

---

### Contact Information:

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany  
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: [info@sysmex-partec.com](mailto:info@sysmex-partec.com)

- Muto T, Miyoshi K, Munesue S, Nakada H, Okayama M, Matsuo T, Noma T: Differential expression of syndecan isoforms during mouse incisor amelogenesis. *J Med Invest.* 2007 Aug; 54(3-4):331-9. < PMID: 17878683 >
- Choi DS, Kim JH, Ryu HS, Kim HC, Han JH, Lee JS, Min CK: Syndecan-1, a key regulator of cell viability in endometrial cancer. *Int J Cancer.* 2007 Aug 15; 121(4):741-50. < PMID: 17455248 >
- Yang Y, MacLeod V, Dai Y, Khotskaya-Sample Y, Shriver Z, Venkataraman G, Sasisekharan R, Naggi A, Torri G, Casu B, Vlodavsky I, Suva LJ, Epstein J, Yaccoby S, Shaughnessy JD Jr, Barlogie B, Sanderson RD: The syndecan-1 heparan sulfate proteoglycan is a viable target for myeloma therapy. *Blood.* 2007 Sep 15; 110(6):2041-8. < PMID: 17536013 >
- Cheriya V, Glaser KB, Waring JF, Baz R, Hussein MA, Borden EC: G1P3, an IFN-induced survival factor, antagonizes TRAIL-induced apoptosis in human myeloma cells. *J Clin Invest.* 2007 Oct; 117(10):3107-17. < PMID: 17823654 >
- Kuchen S, Robbins R, Sims GP, Sheng C, Phillips TM, Lipsky PE, Ettinger R: Essential role of IL-21 in B cell activation, expansion, and plasma cell generation during CD4+ T cell-B cell collaboration. *J Immunol.* 2007 Nov 1; 179(9):5886-96. < PMID: 17947662 >
- Ojeh N, Hiilesvuo K, Wärrä A, Salmivirta M, Henttinen T, Määttä A: Ectopic expression of syndecan-1 in basal epidermis affects keratinocyte proliferation and wound re-epithelialization. *J Invest Dermatol.* 2008 Jan; 128(1):26-34. < PMID: 17625591 >
- Jilani I, Wei C, Bekele BN, Zhang ZJ, Keating M, Wierda W, Ferrajoli A, Estrov Z, Kantarjian H, O'Brien SM, Giles FJ, Albitar M: Soluble syndecan-1 (sCD138 as a prognostic factor independent of mutation status in patients with chronic lymphocytic leukemia. *Int J Lab Hematol.* 2009 Feb; 31(1):97-105. < PMID: 18190591 >

---

The Safety Data Sheet for this product is available at [www.sysmex-partec.com/services](http://www.sysmex-partec.com/services).

---

---

**Contact Information:**

Sysmex Partec GmbH • Am Flugplatz 13 • 02828 Görlitz • Germany  
Tel +49 3581 8746 0 • Fax +49 3581 8746 70 • E-mail: [info@sysmex-partec.com](mailto:info@sysmex-partec.com)