

# CD138 Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AM2144b

#### **Product Information**

Application WB, E Primary Accession P18827

Other Accession NP\_001006947.1

Reactivity Human
Host Mouse
Clonality Monoclonal

**Isotype** IgG1

**Clone Names** 531CT15.4.1;531CT15.1.4

Calculated MW 32462

### **Additional Information**

**Gene ID** 6382

Other Names Syndecan-1, SYND1, CD138, SDC1, SDC

**Target/Specificity** Purified His-tagged CD138 protein(Fragment) was used to produced this

monoclonal antibody.

**Dilution** WB~~1:100~1:500 E~~Use at an assay dependent concentration.

**Format** Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein G column, followed by dialysis

against PBS.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** CD138 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

#### **Protein Information**

Name SDC1 ( HGNC:10658)

**Synonyms** SDC

**Function** Cell surface proteoglycan that contains both heparan sulfate and

chondroitin sulfate and that links the cytoskeleton to the interstitial matrix (By similarity). Regulates exosome biogenesis in concert with SDCBP and PDCD6IP

(PubMed:<u>22660413</u>). Able to induce its own expression in dental

mesenchymal cells and also in the neighboring dental epithelial cells via an

MSX1-mediated pathway (By similarity).

**Cellular Location** Membrane; Single-pass type I membrane protein. Secreted Secreted,

extracellular exosome Note=Shedding of the ectodomain produces a soluble

form

**Tissue Location** Detected in placenta (at protein level) (PubMed:32337544). Detected in

fibroblasts (at protein level) (PubMed:36213313).

## **Background**

The protein encoded by this gene is a transmembrane (type I) heparan sulfate proteoglycan and is a member of the syndecan proteoglycan family. The syndecans mediate cell binding, cell signaling, and cytoskeletal organization and syndecan receptors are required for internalization of the HIV-1 tat protein. The syndecan-1 protein functions as an integral membrane protein and participates in cell proliferation, cell migration and cell-matrix interactions via its receptor for extracellular matrix proteins. Altered syndecan-1 expression has been detected in several different tumor types. While several transcript variants may exist for this gene, the full-length natures of only two have been described to date. These two represent the major variants of this gene and encode the same protein.

#### References

Tsai, E.W., et al. Transplantation 90(8):875-881(2010) Hozumi, K., et al. FEBS Lett. 584(15):3381-3385(2010) Zyada, M.M., et al. Ann Diagn Pathol 14(3):153-161(2010) Al-Shibli, K., et al. APMIS 118(5):371-382(2010) Szumilo, J., et al. Folia Histochem. Cytobiol. 47(4):571-578(2009)

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