

**CD138 Antibody**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM2157b**

**Specification**

**CD138 Antibody - Product Information**

Application	WB, IF, FC,E
Primary Accession	<a href="#">P18827</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1

**CD138 Antibody - Additional Information**

**Gene ID 6382**

**Other Names**

Syndecan-1, SYND1, CD138, SDC1, SDC

**Target/Specificity**

This CD138 Monoclonal antibody is generated from mouses immunized with a KLH conjugated synthetic peptide selected from human CD138.

**Dilution**

WB~~1:500~1000

IF~~1:10~50

FC~~1:10~50

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.

**CD138 Antibody - 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:[22660413](#)). 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

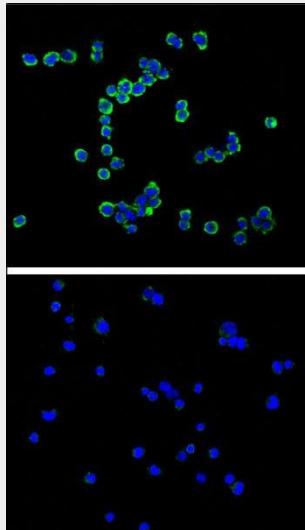
Detected in placenta (at protein level) (PubMed:32337544). Detected in fibroblasts (at protein level) (PubMed:36213313).

### CD138 Antibody - Protocols

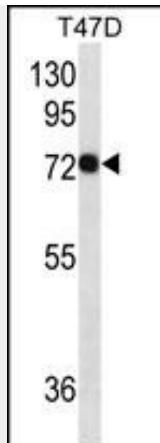
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

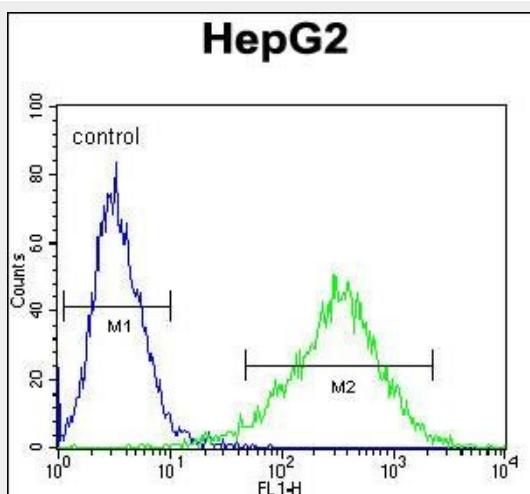
### CD138 Antibody - Images



Confocal immunofluorescent analysis of CD138 antibody (Cat#AM2157a) with RPMI8266 cell (above) compared with Jurkat as negative cell line (below).followed by DyLight 488-conjugated goat anti-mouse IgG (H+L) Secondary Antibody (green).DAPI was used to stain the cell nucleus (blue).



CD138 Antibody (Cat. #AM2157a) western blot analysis in T47D cell line lysates (35 $\mu$ g/lane). This demonstrates the CD138 antibody detected the CD138 protein (arrow).



CD138 Antibody flow cytometric analysis of HepG2 cells (right histogram) compared to a negative control cell (left histogram). Alexa Fluor® 488-conjugated donkey anti-mouse IgG secondary antibodies were used for the analysis

#### CD138 Antibody - 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.