

# Mouse anti CD138 Monoclonal Antibody

Alternative Name(s): Syndecan 1

## **Order Information**

Description: CD138
Catalogue: 604-320
Lot: See label
Size: 100ug/200ul
Host: Mouse
Clone: 1D4

• Application: IHC(P), FC

• Reactivity: Hu

# **ANTIGEN PREPARATION**

A recombinant protein of human CD138

### **BACKGROUND**

Syndecan 1 (CD138) is a transmembrane (type I) heparan sulfate proteoglycan. It belongs to the syndecan proteoglycan family. Cd138 is expressed on epithelial cells, normal and malignant plasma cells, endothelial cells, pre-B cells, and mesenchymal cells. CD138 is involved in the regulation of cell migration, cell-cell and cell-matrix interactions, growth-factor, chemokine and integrin activity, endocytosis, exosome formation, fibrosis, and implicated in inflammatory responses and tumorigenesis. Its structure allows it to bind with cytosolic, transmembrane, and extracellular matrix (ECM) proteins. It plays important roles in mediating key events during wound healing. Degradation of syndecan-1 HS by platelet heparanase creates HS fragments that markedly activate FGF-2 mitogenicity. Syndecan-1 deficiency promotes tumor growth in a murine model of colitis-induced colon carcinoma.

# **PURIFICATION**

The Mouse IgG is purified by Affinity Purification

## **FORMULATION**

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

#### SPECIFICITY

This antibody recognizes human CD138 protein. The other species are not tested.

# **STORAGE**

The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

## **APPLICATIONS/SUGGESTED WORKING DILUTIONS\***

• Western Blot: 0.1-1 μg/ml

• ELISA: 0.01-0.1 μg/ml

• Immunoprecipitation: 2-5 µg/ml

• IHC: 2-10 µg/ml

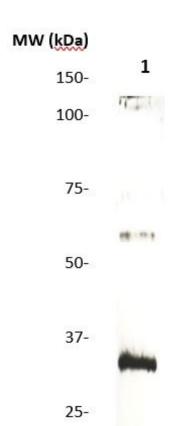
• Flow cytometry: 0.5-5 µg/106 cells

• Molecular Weight: 32.5

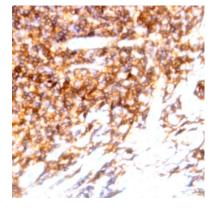
Positive Control: Kidney Tissue
Cellular Location: Cell Membrane

<sup>\*</sup>Optimal dilutions should be determined by researchers for the specific applications.





Western Blot: The whole lysate derived from Hela (20 ug/lane) immunoblotted by mouse anti – CD138 (Cat# 604-320) at 1:500. Observed a major immunoreactive band at molecular weight  $\sim$ 33 kDa.



Immunohistochemistry: Human Tonsil (FFPE) stained with Mouse anti- CD138 antibody (Cat#604-320) at 1:200 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

**REFERENCES** 

### FOR RESEARCH USE ONLY.