

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Syndecan-1/CD138 in direct ELISAs and Western blots. In Western blots, approximately 5% cross-reactivity with recombinant human (rh) Syndecan-1 is observed and less than 1% cross-reactivity with rhSyndecan-2, recombinant mouse (rm) Syndecan-3 and rmSyndecan-4 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Syndecan-1/CD138 isoform 1 Gln18-Glu252 Accession # P18828
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

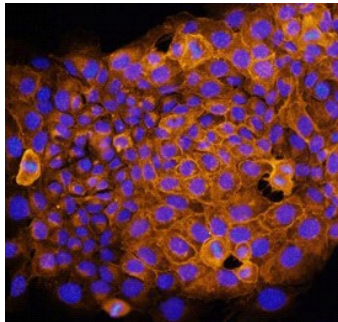
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse Syndecan-1/CD138 (Catalog # 3190-SD)
Flow Cytometry	2.5 µg/10 ⁶ cells	T1165 mouse plasmacytoma cell line
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	3-15 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

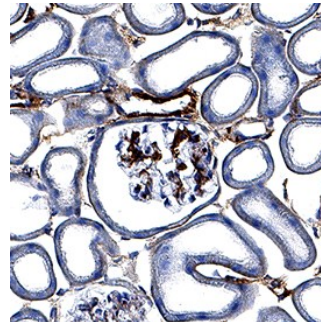
DATA

Immunocytochemistry



Syndecan-1/CD138 in NMuMG Mouse Cell Line. Syndecan-1/CD138 was detected in immersion fixed NMuMG mouse mammary gland epithelial cell line using Mouse Syndecan-1/CD138 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3190) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (yellow; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized to cell surfaces and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



Syndecan-1/CD138 in Mouse Kidney. Syndecan-1/CD138 was detected in perfusion fixed frozen sections of mouse kidney using Goat Anti-Mouse Syndecan-1/CD138 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF3190) at 3 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Goat IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC004). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to glomeruli and convoluted tubules. View our protocol for [IHC Staining with VisUCyte HRP Polymer Detection Reagents](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Syndecan-1 (also known as CD138) is a variably glycosylated, dimeric, type I transmembrane (TM) protein that belongs to the Syndecan family. It is synthesized as a 311 amino acid (aa) precursor that contains a 17 aa signal sequence, a 235 aa extracellular domain (ECD), a 25 aa TM segment, and a 34 aa cytoplasmic region. The ECD shows various degrees of heparan sulfate and chondroitin sulfate modification, leading to native molecular weights for Syndecan-1 of 120-200 kDa. Proteolytic cleavage of the membrane-bound ECD yields soluble forms of approximately the same molecular weight. Syndecan-1 is an epithelial cell Syndecan involved in Wnt and chemokine signaling. The amino acid sequence of mouse Syndecan-1 ECD shares 71% identity with that of the ECD of both rat and human Syndecan-1.