

### KD-Validated Anti-Syndecan binding protein Rabbit Monoclonal Antibody Rabbit monoclonal antibody

Catalog # AGI1079

### Specification

# KD-Validated Anti-Syndecan binding protein Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW Gene Name Aliases	WB, FC, ICC <u>O00560</u> Human Monoclonal Rabbit IgG Predicted, 32 kDa , observed, 32 kDa KDa SDCBP SDCBP; Syndecan Binding Protein; MDA-9; SYCL; Syntenin-1; Pro-TGF-Alpha Cytoplasmic Domain-Interacting Protein 18; Syndecan-Binding Protein 1; Scaffold Protein Pbp1; TACIP18; SDCBP1; MDA9; Melanoma Differentiation Associated Protein-9; Melanoma Differentiation-Associated Protein 9; Syndecan Binding Protein (Syntenin); Syntenin; ST1
Immunogen	A synthesized peptide derived from human Syntenin

## KD-Validated Anti-Syndecan binding protein Rabbit Monoclonal Antibody - Additional Information

Gene ID 6386 Other Names Syntenin-1, Melanoma differentiation-associated protein 9, MDA-9, Pro-TGF-alpha cytoplasmic domain-interacting protein 18, TACIP18, Scaffold protein Pbp1, Syndecan-binding protein 1, SDCBP, MDA9, SYCL

## KD-Validated Anti-Syndecan binding protein Rabbit Monoclonal Antibody - Protein Information

Name SDCBP

Synonyms MDA9, SYCL

### Function

Multifunctional adapter protein involved in diverse array of functions including trafficking of transmembrane proteins, neuro and immunomodulation, exosome biogenesis, and tumorigenesis (PubMed:<a href="http://www.uniprot.org/citations/26291527" target="\_blank">26291527</a>). Positively regulates TGFB1-mediated SMAD2/3 activation and TGFB1-induced



epithelial-to-mesenchymal transition (EMT) and cell migration in various cell types. May increase TGFB1 signaling by enhancing cell-surface expression of TGFR1 by preventing the interaction between TGFR1 and CAV1 and subsequent CAV1-dependent internalization and degradation of TGFR1 (PubMed:<a href="http://www.uniprot.org/citations/25893292"

target="\_blank">25893292</a>). In concert with SDC1/4 and PDCD6IP, regulates exosome biogenesis (PubMed:<a href="http://www.uniprot.org/citations/22660413"

target="\_blank">22660413</a>). Regulates migration, growth, proliferation, and cell cycle progression in a variety of cancer types (PubMed:<a

href="http://www.uniprot.org/citations/26539120" target="\_blank">26539120</a>). In adherens junctions may function to couple syndecans to cytoskeletal proteins or signaling components. Seems to couple transcription factor SOX4 to the IL-5 receptor (IL5RA) (PubMed:<a href="http://www.uniprot.org/citations/11498591" target="\_blank">11498591</a>). May also play a role in vesicular trafficking (PubMed:<a href="http://www.uniprot.org/citations/11498591" target="\_blank">11498591</a>). May also play a role in vesicular trafficking (PubMed:<a href="http://www.uniprot.org/citations/1179419" target="\_blank">11179419</a>). Seems to be required for the targeting of TGFA to the cell surface in the early secretory pathway (PubMed:<a

href="http://www.uniprot.org/citations/10230395" target=" blank">10230395</a>).

### **Cellular Location**

Cell junction, focal adhesion. Cell junction, adherens junction. Cell membrane; Peripheral membrane protein. Endoplasmic reticulum membrane; Peripheral membrane protein. Nucleus. Melanosome. Cytoplasm, cytosol. Cytoplasm, cytoskeleton. Secreted, extracellular exosome. Membrane raft. Note=Mainly membrane-associated Localized to adherens junctions, focal adhesions and endoplasmic reticulum. Colocalized with actin stress fibers. Also found in the nucleus. Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Associated to the plasma membrane in the presence of FZD7 and phosphatidylinositol 4,5-bisphosphate (PIP2) (PubMed:27386966).

### **Tissue Location**

Expressed in lung cancers, including adenocarcinoma, squamous cell carcinoma and small-cell carcinoma (at protein level) (PubMed:25893292). Widely expressed. Expressed in fetal kidney, liver, lung and brain. In adult highest expression in heart and placenta.

### KD-Validated Anti-Syndecan binding protein Rabbit Monoclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>

KD-Validated Anti-Syndecan binding protein Rabbit Monoclonal Antibody - Images





Western blotting analysis using anti-Syndecan binding protein antibody (Cat#AGI1079). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Syndecan binding protein antibody (Cat#AGI1079, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Syndecan binding protein antibody (Cat#AGI1079). Syndecan binding protein expression in wild type (WT) and syndecan binding protein shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-Syndecan binding protein antibody (Cat#AGI1079, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Syndecan binding protein expression in HepG2 cells using Syndecan binding protein antibody (Cat#AGI1079, 1:2,000). Green, isotype control; red, Syndecan binding protein.





Immunocytochemical staining of HepG2 cells with Syndecan binding protein antibody (Cat#AGI1079, 1:1,000). Nuclei were stained blue with DAPI; Syndecan binding protein was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.