SANTA CRUZ BIOTECHNOLOGY, INC.

# syntenin-1 (S-31): sc-100336

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

Syntenin-1 (also known as syntenin, syndecan binding protein, melanoma differentiation-associated protein 9 or proTGFα cytoplasmic domain-interacting protein 18) is a protein that binds to the cytoplasmic domains of the syndecans in yeast 2-hybrid screens and other assays. Syntenin-1 contains a tandem repeat of PDZ domains that reacts with the FYA (phe-tyr-ala) carboxy-terminal amino acid sequence of the syndecans. It may function as an adaptor that couples syndecans to cytoskeletal proteins or cytosolic downstream signal-effectors. Syntenin-1 colocalizes and interacts specifically with immature, intracellular forms of proTGFα. It is a human γ interferon responsive protein. Syntenin-1 contains PSD-95/Discs large/zO-1 (PDZ) domains and associates with the cytoplasmic tail of the IL-5Rα. It directly associates with the transcription factor Sox-4. The PDZ proteins PICK1, GRIP, ABP and syntenin-1 bind multiple glutamate receptor subtypes.

## REFERENCES


1. Grootjans, J.J., et al. 1997. Syntenin, a PDZ protein that binds syndecan cytoplasmic domains. Proc. Natl. Acad. Sci. USA 94: 13683-13688.
2. Lin, J.J., et al. 1998. Melanoma differentiation associated gene-9, MDA-9, is a human γ interferon responsive gene. Gene 207: 105-110.
3. Fernandez-Larrea, J., et al. 1999. A role for a PDZ protein in the early secretory pathway for the targeting of proTGFα to the cell surface. Mol. Cell 3: 423-433.


## CHROMOSOMAL LOCATION

Genetic locus: SDCBP (human) mapping to 8q12.1.

## SOURCE

syntenin-1 (S-31) is a mouse monoclonal antibody raised against a partial recombinant protein sequence of syntenin-1 of human origin.

## PRODUCT

Each vial contains 100 µg $IgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

syntenin-1 (S-31) is recommended for detection of syntenin-1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for syntenin-1 siRNA (h): sc-42164, syntenin-1 shRNA Plasmid (h): sc-42164-SH and syntenin-1 shRNA (h) Lentiviral Particles: sc-42164-V.

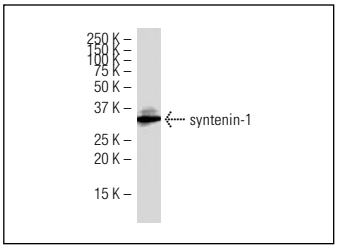
Molecular Weight of syntenin-1: 33 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206 or Hep G2 cell lysate: sc-2227.

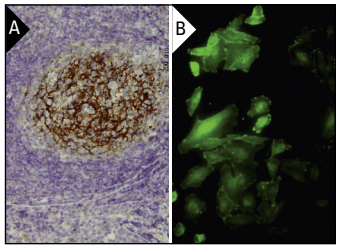
## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA




syntenin-1 (S-31): sc-100336. Western blot analysis of syntenin-1 expression in Hep G2 whole cell lysate.




syntenin-1 (S-31): sc-100336. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human tonsil tissue showing membrane and cytoplasmic localization (**A**). Immunofluorescence staining of paraformaldehyde-fixed Hep G2 cells showing membrane and cytoplasmic localization (**B**).

## SELECT PRODUCT CITATIONS


1. Okumura, F., et al. 2011. MDA-9/syntenin interacts with ubiquitin via a novel ubiquitin-binding motif. Mol. Cell. Biochem. 352: 163-172.
2. Lopes-Rodrigues, V., et al. 2016. Multidrug resistant tumour cells shed more microvesicle-like EVs and less exosomes than their drug-sensitive counterpart cells. Biochim. Biophys. Acta 1860: 618-627.
3. Ouyang, Y., et al. 2016. Isolation of human trophoblastic extracellular vesicles and characterization of their cargo and antiviral activity. Placenta 47: 86-95.
4. Grabel, L., et al. 2016. The CD63-syntenin-1 complex controls post-endocytic trafficking of oncogenic human papillomaviruses. Sci. Rep. 6: 32337.
5. Wang, L.K., et al. 2016. MDA-9/syntenin-Slug transcriptional complex promote epithelial-mesenchymal transition and invasion/metastasis in lung adenocarcinoma. Oncotarget 7: 386-401.
6. Das, S.K., et al. 2016. Knockout of MDA-9/syntenin (SDCBP) expression in the microenvironment dampens tumor-supporting inflammation and inhibits melanoma metastasis. Oncotarget 7: 46848-46861.
7. Kim, S.B., et al. 2017. Caspase-8 controls the secretion of inflammatory lysyl-tRNA synthetase in exosomes from cancer cells. J. Cell Biol. 216: 2201-2216.
8. Rider, M.A., et al. 2018. The interactome of EBV LMP1 evaluated by proximity-based BioID approach. Virology 516: 55-70.
9. Liu, J., et al. 2018. Syntenin-targeted peptide blocker inhibits progression of cancer cells. Eur. J. Med. Chem. 154: 354-366.


## RESEARCH USE

For research use only, not for use in diagnostic procedures.