

syntenin-1 (E-3): sc-515507

BACKGROUND

Syntenin-1 (also known as syntenin, syndecan binding protein, melanoma differentiation-associated protein 9 or proTGF α 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 co-localizes and interacts specifically with immature, intracellular forms of proTGF α . 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-5R α . It directly associates with the transcription factor Sox-4. The PDZ proteins PICK1, GRIP, ABP and syntenin-1 bind multiple glutamate receptor subtypes.

REFERENCES

- Grootjans, J.J., et al. 1997. Syntenin, a PDZ protein that binds syndecan cytoplasmic domains. *Proc. Natl. Acad. Sci. USA* 94: 13683-13688.
- Lin, J.J., et al. 1998. Melanoma differentiation associated gene-9, MDA-9, is a human γ interferon responsive gene. *Gene* 207: 105-110.
- Fernandez-Larrea, J., et al. 1999. A role for a PDZ protein in the early secretory pathway for the targeting of proTGF- α to the cell surface. *Mol. Cell* 3: 423-433.
- Geijsen, N., et al. 2001. Cytokine-specific transcriptional regulation through an IL-5R α interacting protein. *Science* 293: 1136-1138.
- Hirbec, H., et al. 2002. The PDZ proteins PICK1, GRIP and syntenin bind multiple glutamate receptorsubtypes: analysis of PDZ binding motifs. *J. Biol. Chem.* 277: 15221-15224.

CHROMOSOMAL LOCATION

Genetic locus: SDCBP (human) mapping to 8q12.1; Sdcbp (mouse) mapping to 4 A1.

SOURCE

syntenin-1 (E-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 29-54 near the N-terminus of syntenin-1 of human origin.

PRODUCT

Each vial contains 200 μ g IgM kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-515507 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

Store at 4 $^{\circ}$ C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

syntenin-1 (E-3) is recommended for detection of syntenin-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (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 siRNA (m): sc-42165, syntenin-1 shRNA Plasmid (h): sc-42164-SH, syntenin-1 shRNA Plasmid (m): sc-42165-SH, syntenin-1 shRNA (h) Lentiviral Particles: sc-42164-V and syntenin-1 shRNA (m) Lentiviral Particles: sc-42165-V.

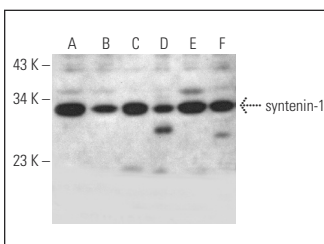
Molecular Weight of syntenin-1: 33 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HEK293 whole cell lysate: sc-45136 or Jurkat whole cell lysate: sc-2204.

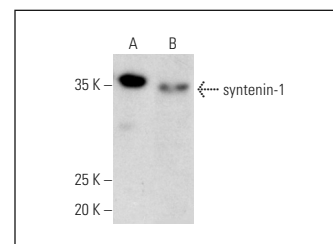
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



syntenin-1 (E-3): sc-515507. Western blot analysis of syntenin-1 expression in HeLa (A), A-431 (B), HEK293 (C), Hep G2 (D), A549 (E) and Jurkat (F) whole cell lysates.



syntenin-1 (E-3): sc-515507. Western blot analysis of syntenin-1 expression in CCRF-CEM (A) and C6 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

- Kim, O., et al. 2022. Syntenin-1-mediated small extracellular vesicles promotes cell growth, migration, and angiogenesis by increasing onco-miRNAs secretion in lung cancer cells. *Cell Death Dis.* 13: 122.

RESEARCH USE

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