

syntenin-1 (C-3): sc-515538

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 colocalizes and interacts specifically with immature, intracellular forms of proTGF- α . It is a human gamma 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

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 proTGF- α to the cell surface. *Mol. Cell* 3: 423-433.

CHROMOSOMAL LOCATION

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

SOURCE

syntenin-1 (C-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 IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

syntenin-1 (C-3) is available conjugated to agarose (sc-515538 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515538 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515538 PE), fluorescein (sc-515538 FITC), Alexa Fluor® 488 (sc-515538 AF488), Alexa Fluor® 546 (sc-515538 AF546), Alexa Fluor® 594 (sc-515538 AF594) or Alexa Fluor® 647 (sc-515538 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515538 AF680) or Alexa Fluor® 790 (sc-515538 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515538 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

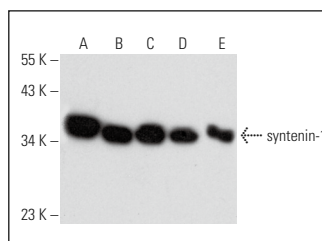
syntenin-1 (C-3) is recommended for detection of syntenin-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), 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 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.

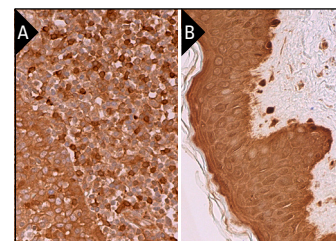
Molecular Weight of syntenin-1: 33 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, Neuro-2A whole cell lysate: sc-364185 or C6 whole cell lysate: sc-364373.

DATA



syntenin-1 (C-3): sc-515538. Western blot analysis of syntenin-1 expression in CCRF-CEM (A), WEHI-231 (B), Neuro-2A (C), RAW 264.7 (D) and C6 (E) whole cell lysates.



syntenin-1 (C-3): sc-515538. Immunoperoxidase staining of formalin fixed, paraffin-embedded human tonsil tissue showing cytoplasmic and nuclear staining of cells in non-germinal center and squamous epithelial cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human skin tissue showing cytoplasmic and nuclear staining of keratinocytes, fibroblasts, Langerhans cells and melanocytes (B).

SELECT PRODUCT CITATIONS

1. Chen, Q.G., et al. 2020. Optimization of urinary small extracellular vesicle isolation protocols: implications in early diagnosis, stratification, treatment and prognosis of diseases in the era of personalized medicine. *Am. J. Transl. Res.* 12: 6302-6313.
2. Paules, E.M., et al. 2023. Choline regulates SOX4 through miR-129-5p and modifies H3K27me3 in the developing cortex. *Nutrients* 15: 2774.
3. Melnik, M., et al. 2024. Simultaneous isolation of intact brain cells and cell-specific extracellular vesicles from cryopreserved Alzheimer's disease cortex. *J. Neurosci. Methods* 406: 110137.

STORAGE

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

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