

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

- 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.

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

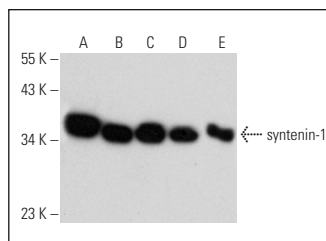
syntenin-1 (C-3) is recommended for detection of syntenin-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution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

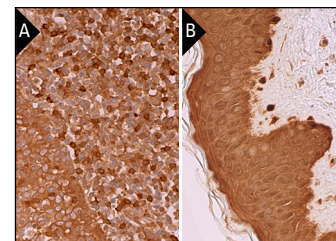
Molecular Weight of syntenin-1: 33 kDa.

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

- 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.
- Kobayashi, Y., et al. 2021. Protein composition of circulating extracellular vesicles immediately changed by particular short time of high-intensity interval training exercise. *Front. Physiol.* 12: 693007.
- Beillevalaire, D., et al. 2022. Autolysosomes and caspase-3 control the biogenesis and release of immunogenic apoptotic exosomes. *Cell Death Dis.* 13: 145.

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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