

Serglycin (C-11): sc-374657

BACKGROUND

Proteoglycans stored in the secretory granules of many hematopoietic cells contain a protease-resistant peptide core that may be important for neutralizing hydrolytic enzymes. Serglycin is associated with the macromolecular complex of granzymes and perforin, which may serve as a mediator of granule-mediated apoptosis. Serglycin is a chondroitin sulfate-bearing proteoglycan that functions in the transport of cationic granular proteins. The immune system relies on granule exocytosis as the main pathway for elimination of virus-infected cells and tumor cells by cytotoxic T lymphocytes and natural killer cells, thus indicating an important role for Serglycin in normal immune function.

CHROMOSOMAL LOCATION

Genetic locus: SRGN (human) mapping to 10q22.1; Srgn (mouse) mapping to 10 B4.

SOURCE

Serglycin (C-11) is a mouse monoclonal antibody raised against amino acids 1-158 representing full length Serglycin of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Serglycin (C-11) is available conjugated to agarose (sc-374657 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374657 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374657 PE), fluorescein (sc-374657 FITC), Alexa Fluor® 488 (sc-374657 AF488), Alexa Fluor® 546 (sc-374657 AF546), Alexa Fluor® 594 (sc-374657 AF594) or Alexa Fluor® 647 (sc-374657 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374657 AF680) or Alexa Fluor® 790 (sc-374657 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Serglycin (C-11) is recommended for detection of precursor and mature Serglycin of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 Serglycin siRNA (h): sc-44093, Serglycin siRNA (m): sc-153346, Serglycin shRNA Plasmid (h): sc-44093-SH, Serglycin shRNA Plasmid (m): sc-153346-SH, Serglycin shRNA (h) Lentiviral Particles: sc-44093-V and Serglycin shRNA (m) Lentiviral Particles: sc-153346-V.

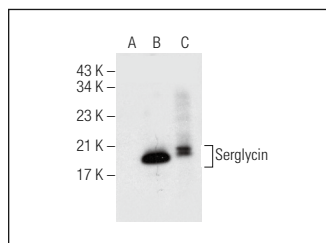
Molecular Weight of Serglycin isoforms: 22/24 kDa.

Positive Controls: Serglycin (h): 293 Lysate: sc-113121, HL-60 whole cell lysate: sc-2209 or THP-1 cell lysate: sc-2238.

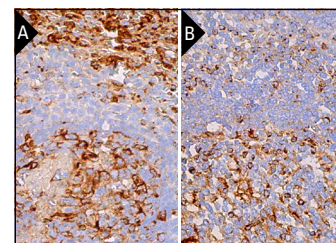
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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 A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Serglycin (C-11): sc-374657. Western blot analysis of Serglycin expression in non-transfected 293: sc-110760 (A), human Serglycin transfected 293: sc-113121 (B) and HL-60 (C) whole cell lysates.



Serglycin (C-11): sc-374657. Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of subset of cells in white pulp and cells in red pulp (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing cytoplasmic staining of lymphoid cells (B).

SELECT PRODUCT CITATIONS

- He, Y., et al. 2021. Serglycin induces osteoclastogenesis and promotes tumor growth in giant cell tumor of bone. *Cell Death Dis.* 12: 868.
- Du, Q., et al. 2022. miR-26b-5p suppresses chemoresistance in breast cancer by targeting Serglycin. *Anticancer Drugs* 33: 308-319.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.