

Serglycin (D-19): sc-28008

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.

REFERENCES

1. Raja, S.M., et al. 2002. Cytotoxic cell granule-mediated apoptosis. Characterization of the macromolecular complex of granzyme B with serglycin. *J. Biol. Chem.* 277: 49523-49530.
2. Lemansky, P., et al. 2003. Targeting myeloperoxidase to azurophilic granules in HL-60 cells. *J. Leukoc. Biol.* 74: 542-550.
3. Lieberman, J. 2003. The ABCs of granule-mediated cytotoxicity: new weapons in the arsenal. *Nat. Rev. Immunol.* 3: 361-370.
4. Schick, B.P., et al. 2003. Serglycin proteoglycan expression and synthesis in embryonic stem cells. *Biochim. Biophys. Acta* 1593: 259-267.

CHROMOSOMAL LOCATION

Genetic locus: SRGN (human) mapping to 10q22.1.

SOURCE

Serglycin (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Serglycin of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-28008 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Serglycin (D-19) is recommended for detection of precursor and mature Serglycin 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) 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 shRNA Plasmid (h): sc-44093-SH and Serglycin shRNA (h) Lentiviral Particles: sc-44093-V.

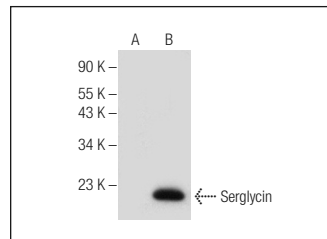
Molecular Weight of Serglycin: 22/24 kDa.

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

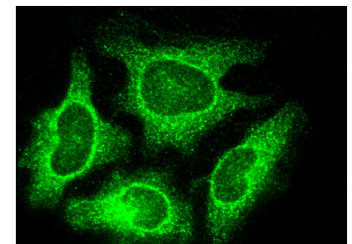
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Serglycin (D-19): sc-28008. Western blot analysis of Serglycin expression in non-transfected: sc-110760 (A) and human Serglycin transfected: sc-113121 (B) 293 whole cell lysates.



Serglycin (D-19): sc-28008. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

SELECT PRODUCT CITATIONS

1. Lemansky, P., et al. 2007. The cation-independent mannose 6-phosphate receptor is involved in lysosomal delivery of serglycin. *J. Leukoc. Biol.* 81: 1149-1158.
2. Imoto-Tsubakimoto, H., et al. 2013. Serglycin is a novel adipocytokine highly expressed in epicardial adipose tissue. *Biochem. Biophys. Res. Commun.* 432: 105-110.

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 or our catalog for detailed protocols and support products.



Try **Serglycin (C-11): sc-374657** or **Serglycin (H-9): sc-393521**, our highly recommended monoclonal alternatives to Serglycin (D-19).