SANTA CRUZ BIOTECHNOLOGY, INC.

Serglycin (M-58): sc-292312

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.
5. Abrink, M., et al. 2004. Serglycin is essential for maturation of mast cell secretory granule. J. Biol. Chem. 279: 40897-40905.
6. Niemann, C.U., et al. 2004. Localization of Serglycin in human neutrophil granulocytes and their precursors. J. Leukoc. Biol. 76: 406-415.
7. Veugelers, K., et al. 2004. The granzyme B-Serglycin complex from cytotoxic granules requires dynamin for endocytosis. Blood 103: 3845-3853.

CHROMOSOMAL LOCATION

Genetic locus: Srgn (mouse) mapping to 10 B4.

SOURCE

Serglycin (M-58) is a rabbit polyclonal antibody raised against amino acids 1-58 mapping at the N-terminus of Serglycin of mouse origin.

PRODUCT

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

STORAGE

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

PROTOCOLS

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

APPLICATIONS

Serglycin (M-58) is recommended for detection of precursor and mature Serglycin of mouse and rat 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 (m): sc-153346, Serglycin shRNA Plasmid (m): sc-153346-SH and Serglycin shRNA (m) Lentiviral Particles: sc-153346-V.

Molecular Weight of Serglycin: 22/24 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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