

Slfn1 (I-19): sc-8898

BACKGROUND

Schlafen family members, including Slfn1, Slfn2, Slfn3 and Slfn4, are preferentially expressed in lymphoid tissues and are differentially regulated during thymocyte maturation. Schlafen proteins function as suppressors of cell growth and are thought to play a role in the maintenance of T cell quiescence. The prototype member of the Schlafen family, Slfn1, is transcriptionally unregulated during thymocyte positive selection, and the induction of Slfn1 induces a G0/G1 arrest, suggesting that Slfn1 participates in the regulation of cell cycle and potentially acts as a determining factor for apoptosis. These proteins all contain a largely conserved core domain within the center of the sequence, and yet they are substantially diversified at the N terminus. Slfn1 and Slfn2 are both unregulated during the double-positive (DP) and single-positive (SP) stages of thymocyte development, whereas Slfn4 is down regulated at these stages. Changes in Schlafen protein expression may contribute to phenotypic differences seen in thymic subsets.

REFERENCES

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- Takeuchi, T., Kuro-o, M., Miyazawa, H., Ohtsuki, Y. and Yamamoto, H. 1997. Transgenic expression of a novel thymic epithelial cell antigen stimulates aberrant development of thymocytes. *J. Immunol.* 159: 726-733.
- Hershberger, P.A., He, H. and McCarthy, S.A. 1998. *In vitro* thymocyte maturation is associated with reduced cellular susceptibility to Fas-mediated apoptosis. *Cell. Immunol.* 185: 134-145.
- Schwarz, D.A., Katayama, C.D. and Hedrick, S.M. 1998. Schlafen, a new family of growth regulatory genes that affect thymocyte development. *Immunity* 9: 657-668.
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CHROMOSOMAL LOCATION

Genetic locus: Slfn1 (mouse) mapping to 11 C.

SOURCE

Slfn1 (I-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Slfn1 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.

Blocking peptide available for competition studies, sc-8898 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Slfn1 (I-19) is recommended for detection of Slfn1 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 Slfn1 siRNA (m): sc-40924, Slfn1 shRNA Plasmid (m): sc-40924-SH and Slfn1 shRNA (m) Lentiviral Particles: sc-40924-V.

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) 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.

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.