

Slfn11 (D-12): sc-136890

BACKGROUND

Schlafen family members 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. All members of the Schlafen family contain a conserved core domain and are substantially diversified at the N terminus. The prototype member of the Schlafen family, Slfn1, is transcriptionally unregulated during thymocyte positive selection and its induction leads to G₀/G₁ arrest, suggesting that Slfn1 participates in the regulation of cell cycle and potentially acts as a determining factor for apoptosis. 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. Slfn11 (Schlafen family member 11), also known as SLFN8/9, is a 901 amino acid protein belonging to the Schlafen family.

REFERENCES

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- Schwarz, D.A., et al. 1998. Schlafen, a new family of growth regulatory genes that affect thymocyte development. *Immunity* 9: 657-668.
- Hershberger, P.A., et al. 1998. *In vitro* thymocyte maturation is associated with reduced cellular susceptibility to Fas-mediated apoptosis. *Cell. Immunol.* 185: 134-145.
- Benoist, C., et al. 1999. T-cell development: a new marker of differentiation state. *Curr. Biol.* 9: R59-R61.
- Brady, G., et al. 2005. Schlafen-1 causes a cell cycle arrest by inhibiting induction of cyclin D1. *J. Biol. Chem.* 280: 30723-30734.

CHROMOSOMAL LOCATION

Genetic locus: SLFN11 (human) mapping to 17q12.

SOURCE

Slfn11 (D-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Slfn11 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-136890 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Slfn11 (D-12) is recommended for detection of Slfn11 of human 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); non cross-reactive with other Slfn family members.

Suitable for use as control antibody for Slfn11 siRNA (h): sc-93615, Slfn11 shRNA Plasmid (h): sc-93615-SH and Slfn11 shRNA (h) Lentiviral Particles: sc-93615-V.

Molecular Weight of Slfn11: 103 kDa.

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.

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 **Slfn11 (E-4): sc-374339** or **Slfn11 (D-2): sc-515071**, our highly recommended monoclonal alternatives to Slfn11 (D-12). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Slfn11 (E-4): sc-374339**.