

## Slfn14 (S-20): sc-248645

### 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. The prototype member of the Schlafen family, Slfn1, is transcriptionally unregulated during thymocyte positive selection, and the induction of Slfn1 induces a G<sub>0</sub>/G<sub>1</sub> 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. Slfn14 (Schlafen family member 14) is a 912 amino acid protein belonging to the Schlafen family. Slfn14 exists as two alternatively spliced isoforms and is encoded by a gene mapping to human chromosome 17q12.

### REFERENCES

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- Bell, T.A., et al. 2006. The paternal gene of the DDK syndrome maps to the Schlafen gene cluster on mouse chromosome 11. *Genetics* 172: 411-423.
- Neumann, B., et al. 2008. Subcellular localization of the Schlafen protein family. *Biochem. Biophys. Res. Commun.* 370: 62-66.
- Bustos, O., et al. 2009. Evolution of the Schlafen genes, a gene family associated with embryonic lethality, meiotic drive, immune processes and orthopoxvirus virulence. *Gene* 447: 1-11.
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- Katsoulidis, E., et al. 2010. Role of interferon  $\alpha$  (IFN $\alpha$ )-inducible Schlafen-5 in regulation of anchorage-independent growth and invasion of malignant melanoma cells. *J. Biol. Chem.* 285: 40333-40341.
- Horton, M.R., et al. 2010. Quieting T cells with Slfn2. *Nat. Immunol.* 11: 281-282.

### CHROMOSOMAL LOCATION

Genetic locus: SLFN14 (human) mapping to 17q12.

### SOURCE

Slfn14 (S-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Slfn14 of human origin.

### STORAGE

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

### PRODUCT

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

Blocking peptide available for competition studies, sc-248645 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

Slfn14 (S-20) is recommended for detection of Slfn14 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 Slfn14 siRNA (h): sc-94090, Slfn14 shRNA Plasmid (h): sc-94090-SH and Slfn14 shRNA (h) Lentiviral Particles: sc-94090-V.

Molecular Weight of Slfn14 isoforms 1/2: 104/102 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.

### RESEARCH USE

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

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.