

TSLP (M-140): sc-33792

BACKGROUND

Thymic stromal lymphopoietin (TSLP) is a novel member of the hemopoietic cytokine family that promotes the development of B cells and shares overlapping activity with IL-7. The gene encoding murine TSLP maps to chromosome 18. Its human homolog is expressed in several tissues, including heart, liver and prostate. TSLP mediates its function by binding to a receptor complex: first binding with low affinity to a TSLP-specific chain designated TSLPR, then forming a high affinity complex with the IL-7R α subunit, which explains the overlapping biological properties between TSLP and IL-7. Both TSLP and IL-7 induce phosphorylation of the transcription factor Stat5, but unlike IL-7, TSLP-mediated signaling does not activate the JAKs. TSLP prevents apoptosis and stimulates the proliferation of myeloid cells, which is supported by the coexpression of TSLPR and IL-7R α on monocytes and dendritic cells.

REFERENCES

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3. Sims, J.E., et al. 2000. Molecular cloning and biological characterization of a novel murine lymphoid growth factor. *J. Exp. Med.* 192: 671-680.
4. Pandey, A., et al. 2000. Cloning of a receptor subunit required for signaling by thymic stromal lymphopoietin. *Nat. Immunol.* 1: 59-64.
5. Park, L.S., et al. 2000. Cloning of the murine thymic stromal lymphopoietin (TSLP) receptor: formation of a functional heteromeric complex requires interleukin 7 receptor. *J. Exp. Med.* 192: 659-670.
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CHROMOSOMAL LOCATION

Genetic locus: TSLP (human) mapping to 5q22.1; Tslp (mouse) mapping to 18 B1.

SOURCE

TSLP (M-140) is a rabbit polyclonal antibody raised against amino acids 1-140 representing full length TSLP of mouse origin.

PRODUCT

Each vial contains 200 μ g 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.

APPLICATIONS

TSLP (M-140) is recommended for detection of TSLP of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 TSLP siRNA (m): sc-39821, TSLP shRNA Plasmid (m): sc-39821-SH and TSLP shRNA (m) Lentiviral Particles: sc-39821-V.

Molecular Weight of TSLP: 16 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.

PROTOCOLS

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