SANTA CRUZ BIOTECHNOLOGY, INC.

TSLPR (S-18): sc-23621

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 homologue 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-7Ra 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-7Ra on monocytes and dendritic cells.

REFERENCES

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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: Tslpr (mouse) mapping to 5 F.

STORAGE

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

SOURCE

TSLPR (S-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TSLPR 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-23621 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TSLPR (S-18) is recommended for detection of TSLPR of mouse 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 TSLPR siRNA (m): sc-40274, TSLPR shRNA Plasmid (m): sc-40274-SH and TSLPR shRNA (m) Lentiviral Particles: sc-40274-V.

Molecular Weight (predicted) of TSLPR isoforms: 27/42 kDa.

Molecular Weight (observed) of TSLPR isoforms: 40/49 kDa.

Positive Controls: IB4 whole cell lysate.

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.