

## Human TSLP Recombinant Protein

**Catalog Number:** 14-8497

**Also Known As:** Thymic Stromal-Derived Lymphopoietin

**RUO: For Research Use Only. Not for use in diagnostic procedures.**

### Product Information

**Contents:** Human TSLP Recombinant Protein

**REF** **Catalog Number:** 14-8497

**Handling Conditions:** For best recovery, quick-spin vial prior to opening. Use in a sterile environment

**Source:** Insect cell expressed amino acids Y29-Q159 of hTSLP accession #NM\_033035

**Molecular Mass:** 15 kDa on SDS-PAGE

**Purity:** > 95%, as determined by SDS-PAGE

**Endotoxin Level:** Less than 0.01 ng/ug cytokine as determined by the LAL assay.

**Bioactivity:** Measured by TARC induction by human PBMCs with an observed ED<sub>50</sub> of 10 ng/mL, which corresponds to a specific activity of approximately 1x10<sup>5</sup> Units/mg.

**Formulation:** Sterile liquid; PBS, pH 7.2 with 1.0% BSA. 0.22 um filtered.



**Temperature Limitation:** Store at less than or equal to -70°C.



**Batch Code:** Refer to Vial



**Use By:** Refer to Vial

### Description

Thymic Stromal Lymphopoietin (TSLP) is a member of the B cell-stimulating factor family. This hemopoietic cytokine was identified from the conditioned medium of a mouse thymic stromal cell line that promoted B-cell development. TSLP is expressed in thymus, spleen, kidney, lung and bone marrow. The bioactivity of TSLP overlaps with that of IL-7, playing a key role in B cell development, as well as stimulating the growth of thymocytes and T cells. Whereas IL-7 facilitates the development of B220+/IgM- pre-B cells, TSLP promotes the development B220+/IgM+ B cells in the mouse. In addition, TSLP stimulates monocytes to produce the T cell-attracting chemokines TARC (CCL17) and MDC (CCL22). TSLP also activates dendritic cell-primed CD4 T cells to produce Th2 cytokines (e.g. IL-4, IL-5, IL-13, and TNF $\alpha$ ). TSLP binds to a heterodimeric receptor complex consisting of the IL-7R alpha chain (IL-7R $\alpha$ ) and the TSLP-specific chain (TSLPR) to induce STAT3 and STAT5 phosphorylation. Mouse TSLP shares approximately 43% amino acid sequence identity with human TSLP. Recombinant human TSLP is a 15.0 kDa protein consisting of 121 amino acid residues.

### Applications Reported

Recombinant human TSLP is biologically active.

### Applications Tested

This recombinant human TSLP has been tested for TARC induction by normal human peripheral blood cells with an observed ED<sub>50</sub> of 10 ng/ml, which corresponds to a specific activity of approximately 1x10<sup>5</sup> Units/mg.

### References

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### Related Products

14-5496 Anti-Human TSLP Purified (eBio15B11.3 (15B11.3 ))

34-8497 Human TSLP Recombinant Protein Carrier-Free

88-7497 Human TSLP ELISA Ready-SET-Go!® Set

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