

# Recombinant Human TSLP

<b>CATALOG #:</b>	4896-20	20 µg
	4896-100	100 µg
	4896-1000	1 mg
<b>SYNONYMS:</b>	Thymic Stromal Lymphopoietin, TSLP	
<b>SOURCE:</b>	<i>E. coli</i>	
<b>PURITY:</b>	> 97% by SDS-PAGE and RP-HPLC analyses Endotoxin level is <0.1 ng/µg of human TSLP	
<b>MOLECULAR WT:</b>	15 kDa	
<b>FORM:</b>	Lyophilized from sterile filtered 10 mM Na <sub>2</sub> PO <sub>4</sub> , pH 7.5.	

**RECONSTITUTION:**

Centrifuge the vial prior to opening. Reconstitute in sterile dH<sub>2</sub>O to a concentration of 0.1 mg/ml and let the lyophilized pellet dissolve completely. This solution can then be diluted into other aqueous buffers and stored at 4°C for 1 week or -20°C for future use.

**STORAGE CONDITIONS:**

The lyophilized human TSLP is best-stored desiccated below 0°C. Reconstituted TSLP should be stored in working aliquots at -20°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**DESCRIPTION:**

TSLP protein is a hemopoietic cytokine which signals throughout a heterodimeric receptor complex composed of the thymic stromal lymphopoietin receptor & the Interleukin-7 receptor alpha chain. TSLP impacts myeloid cells thus induces the discharge of T cell-attracting chemokines from monocytes & increases the growth of CD11c(+) dendritic cells. TSLP is mainly expressed in the heart, liver and prostate. TSLP is related in its biological activities with IL-7 and binds with the heterodimeric receptor complex consisting of the Interleukin-7 receptor alpha chain & the TSLPR. Similar to IL-7, TSLP enhances phosphorylation of STAT3 and STAT5, though uses kinases excluding JAKs for its activation. TSLP induces the release of T cell-attracting chemokines such as TARC & MDC from monocytes & triggers CD11c(+) dendritic cells. Recombinant human TSLP produced in *E. Coli* is a single, non-glycosylated polypeptide chain containing 132 amino acids and having a molecular mass of 15 kDa.

**BIOLOGICAL ACTIVITY:**

The ED<sub>50</sub> determined by a cell proliferation assay using BF3 cells transiently expressing of human IL-7Ra & human TSLP-R was typically found to be 0.05 - 0.3 ng/ml.

**AA SEQUENCE:**

MYDFTNCDFEKIKAAAYLSTISKDLITYMSGTKSTEFNNTVSCSNRPHCLTEIQSLTFNPTAGCASLA  
KEMFAMKTKAALAIWCPGYSETQINATQAMKKRRKRKVTTNKCLEQVSQLQGLWRRFNRPLLKQ

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