

Recombinant Human Thymic Stromal Lymphopoietin

Human, Recombinant (TSLP)

Expressed in *E. coli*

Cat. No. CRP08105

Lot. No. (See product label)

PRODUCT INFORMATION

Description: TSLP is a hemopoietic protein that is expressed in the heart, liver and prostate. TSLP overlaps biological activities with IL-7 and binds with the heterodimeric receptor complex consisting of the IL-7R alpha chain (IL-7R α) and the TSLP-specific chain (TSLPR). Like IL-7, TSLP induces phosphorylation of STAT3 and STAT5, but uses kinases other than the JAKs for activation. TSLP prohibited apoptosis and stimulated growth of the human acute myeloid leukemia (AML)-derived cell line MUTZ3. It induces the release of T cell-attracting chemokines TARC and MDC from monocytes and activates CD11c(+) dendritic cells (DCs). TSLP activated DCs primed naïve T cells to produce the proallergic cytokines (IL-4, IL-5, IL-13, TNF α) while down-regulating IL-10 and IFN- γ suggesting a role in initiating allergic inflammation.

Amino-Acid Sequence: 132 aa , non-glycosylated

M. W. : 15.0 KDa

Recombinant: Expressed in *E. coli*

Purity: >98% by SDS-PAGE and HPLC analyses.

Formulation: Lyophilized from a 0.2mm filtered concentrated (1.0mg/ml) solution in 20mM PB, pH 7.4, 150mM NaCl.

Specific Activity: Fully biologically active when compared to standard. The ED50 as measured by its ability to induce proliferation of human IL-7R α and human TSLP R co-transfected mouse BaF3 cells is less than 0.3 ng/ml.

Endotoxin: Less than 1EU/mg of rHuTSLP as determined by LAL method.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at $\leq -20^{\circ}\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Storage: This lyophilized preparation is stable for several weeks at 2-8 $^{\circ}\text{C}$, but should be kept at -20°C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 $^{\circ}\text{C}$. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -70°C . Avoid repeated freeze/thaw cycles.

GENE INFORMATION

Gene Name: [TSLP](#)

Synonyms: Thymic Stromal Lymphopoietin; Thymic stromal lymphopoietin Precursor; TSLP

mRNA Refseq: [NM_033035](#)

Protein Refseq: [NP_149024](#)

MIM: [607003](#)

GeneID: [85480](#)

UniProt ID: Q969D9

Chromosome Location: 5q22.1

Pathway: Cytokine-cytokine receptor interaction; Jak-STAT signaling pathway.

Function: cytokine activity.

REFERENCES

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