



Technical Data Sheet

Recombinant Human Thymic Stromal Lymphopoietin (rHu TSLP)

Human Thymic Stromal Lymphopoietin

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 naive 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.

Catalog Number:	RC213-18
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 15.0 KDa, a single non-glycosylated polypeptide chain containing 132 amino acids.
Quantity:	2ug/10ug/1000 μ g
Purity:	>98% by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ 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.
Physical Appearance:	Sterile Filtered White lyophilized (freeze-dried) powder.
Formulation:	Lyophilized from a 0.2 μ m filtered concentrated (1.0mg/ml) solution in 20mM PB, pH 7.4, 150mM NaCl.
AA Sequence:	MYDFTNCDFE KIKAAYLSTI SKDLITYMSG TKSTEFNNTV SCSNRPHCLT EIQSLTFNPT AGCASLAKEM FAMKTKAALA IWCPGYSETQ INATQAMKKR RKRKVTTNKC L EQVSQLQG L WRRFNRPL LK QQ
Endotoxin:	Less than 1EU/ μ g 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°C. Further dilutions should be made in appropriate buffered solutions.
Storage:	This lyophilized preparation is stable at 2-8°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°C. For maximal stability, apportion the reconstituted



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Usage:

preparation into working aliquots and store at -20°C to -70°C . **Avoid repeated freeze/thaw cycles.**

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