

## Product Datasheet

# Recombinant Human Thymic Stromal Lymphopoietin (rHuTSLP) (orb1495019)

<b>Description</b>	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 $\alpha$ ) 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 $\alpha$ ) while down-regulating IL-10 and IFN- $\gamma$ suggesting a role in initiating allergic inflammation.
<b>Endotoxins</b>	Less than 1EU/mg of rHuTSLP as determined by LAL method.
<b>Preservatives</b>	Lyophilized from a 0.2mm filtered concentrated solution in 20mM PB, pH 7.4, 150mM NaCl.
<b>Form/Appearance</b>	Lyophilized from a 0.2mm filtered concentrated solution in 20mM PB, pH 7.4, 150mM NaCl.
<b>Storage</b>	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 preparation into working aliquots and store at -20°C to -70°C. Avoid repeated freeze/thaw cycles.
<b>Note</b>	For research use only
<b>Application notes</b>	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 -20°C. Further dilutions should be made in appropriate buffered solutions.

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<b>Protein Sequence</b>	MYDFTNCDFE KIKAAAYLSTI SKDLITYMSG TKSTEFNNTV SCSNRPHCLT EIQSLTFNPT AGCASLAKEM FAMKTKAALA IWCPGYSETQ INATQAMKKR RKRKVTTNKC L EQVSQLQG L WRRFNRPL LK QQ
<b>Purity</b>	> 98% by SDS-PAGE and HPLC analyses.
<b>Source</b>	Escherichia coli.
<b>MW</b>	Approximately 15.0 KDa, a single non-glycosylated polypeptide chain containing 132 amino acids.
<b>Expiration Date</b>	6 months from date of receipt.

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