

PRODUCT DATA SHEET



Bioworld Technology, Inc.

Recombinant Human Thymic Stromal Lymphopoietin (rHuTSLP)

Catalog Number: PR1121

Source: Escherichia coli.

Quantity: 2µg/10µg/1.0mg

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 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.

Molecular Weight:

Approximately 15.0 KDa, a single non-glycosylated polypeptide chain containing 132 amino acids.

Purity:

>98% by SDS-PAGE and HPLC analyses.

Biological 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, corresponding to a Specific Activity of $\square 3.3 \times 10^6$ IU/mg.

Physical Appearance:

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation:

Lyophilized from a 0.2mm filtered concentrated solution in 20mM PB, pH 7.4, 150mM NaCl.

AA Sequence:

MYDFTNCDFEKIKAA YLSTISKDLITYM
SGTKSTEFNNTVSCSNRPHCLTEIQSLT
FNPTAGCASLAKEMFAMKTKAALAIW
CPGYSETQINATQAMKKRRKRKVTTN
KCLEQVSQLQGLWRRFNRP L L K Q Q

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

Usage:

This material is offered by USA Bioworld biotech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE. Made in China

MADE IN CHINA

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