

BACKGROUND

Thymic Stromal Lymphopoietin (TSLP) is a hematopoietic cytokine, produced in several tissues including heart, liver and prostate. TSLP sends signals through a heterodimeric receptor complex, comprised of the TSLP-R and the IL-7R α chain to induce the release of T-cell-attracting chemokines from monocytes.

Recombinant human TSLP is a non-glycosylated protein, comprised of 132 amino acids, with a molecular weight of 15 kDa.

Alternative Names:

None

Amino Acid Sequence:

MYDFTNCDFE KIKAAAYLSTI SKDLITYMSG TKSTEFNNTV
SCSNRPHCLT EIQSLTFNPT AGCASLAKEM FAMKTKAALA
IWCPCGYSETQ INATQAMKKR RKRKVTNNK LEQVSQLQGL
WRRFNRPLL KQQ

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human TSLP is lyophilized from 10 mM Na₂PO₄, pH 7.5.

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is determined by a cell proliferation assay using BaF3 cells transiently expressing human IL-7R α and human TSLP-R and is typically 0.05-0.3 ng/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

