



## Synonym

**TSLP** 

#### Source

Human TSLP Protein, Fc Tag(TSP-H5253) is expressed from human 293 cells (HEK293). It contains AA Tyr 29 - Gln 159 (Accession # Q969D9-1). Predicted N-terminus: Tyr 29

## **Molecular Characterization**

Fc(Pro 100 - Lys 330) TSLP(Tyr 29 - Gln 159) Q969D9-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 41.4 kDa. The protein migrates as 35-38 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE).

## **Endotoxin**

Less than 1.0 EU per µg by the LAL method / rFC method.

## **Purity**

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

## **Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.

Contact us for customized product form or formulation.

#### Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

#### Storage

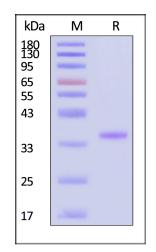
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

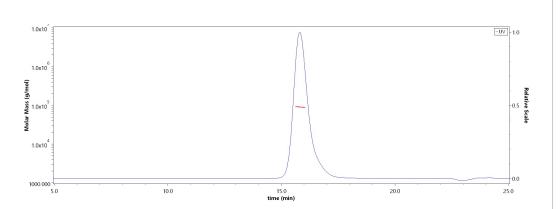
# **SDS-PAGE**



Human TSLP Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

## **Bioactivity-ELISA**

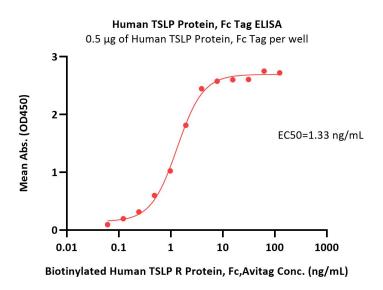
### **SEC-MALS**



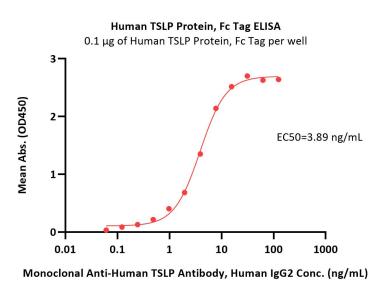
The purity of Human TSLP Protein, Fc Tag (Cat. No. TSP-H5253) is more than 90% and the molecular weight of this protein is around 85-110 kDa verified by SEC-MALS.

<u>Report</u>



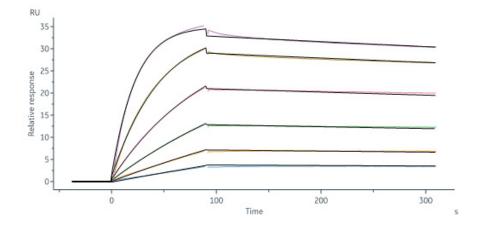


Immobilized Human TSLP Protein, Fc Tag (Cat. No. TSP-H5253) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Human TSLP R Protein, Fc,Avitag (Cat. No. TSR-H82F3) with a linear range of 0.06-4 ng/mL (QC tested).



Immobilized Human TSLP Protein, Fc Tag (Cat. No. TSP-H5253) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Monoclonal Anti-Human TSLP Antibody, Human IgG2 with a linear range of 0.06-8 ng/mL (Routinely tested).

## **Bioactivity-SPR**



Human TSLP R, Fc Tag (Cat. No. TSR-H525a) immobilized on CM5 Chip can bind Human TSLP Protein, Fc Tag (Cat. No. TSP-H5253) with an affinity constant of 47.2 pM as determined in a SPR assay (Biacore 8K) (Routinely tested).

## Background

Thymic stromal lymphopoietin (TSLP) is an epithelial cell-derived cytokine involved in the pathology of inflammatory skin diseases, and is widely expressed by epithelial cells. Human TSLP cDNA encodes a 159 amino acid (aa) residue precursor protein with a 28 aa signal sequence (4, 5). Human TSLP has been shown to developing nondeletional central tolerance, amplifying epithelium-induced class switching, inducing atopic diseases and maintaining intestinal noninflammatory environment. Among diverse cells responding to Human TSLP, CD11c+ dendritic cells are the most obviously characterized target cells.

