



## Synonym

TSLP

## Source

Biotinylated Human TSLP (R127A, R130A) Protein, His,Avitag(TSP-H82E0) is expressed from human 293 cells (HEK293). It contains AA Tyr 29 - Gln 159

(Accession # [Q969D9-1](#) (R127A, R130A)).

Predicted N-terminus: Tyr 29

## Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™).

The protein has a calculated MW of 18.5 kDa. The protein migrates as 25-30 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Labeling

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

## Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

## Endotoxin

Less than 1.0 EU per µg by the LAL 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

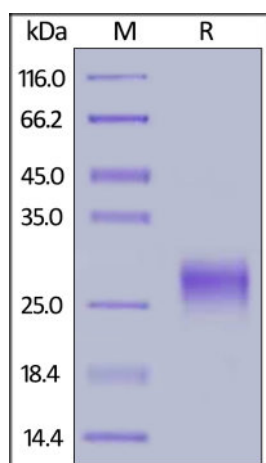
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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 12 months under sterile conditions after reconstitution.

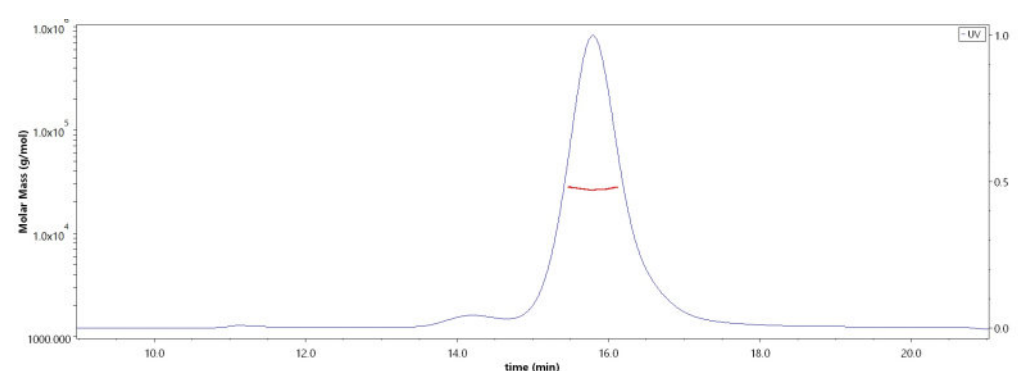
## SDS-PAGE



Biotinylated Human TSLP (R127A, R130A) Protein, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

## Bioactivity-ELISA

## SEC-MALS

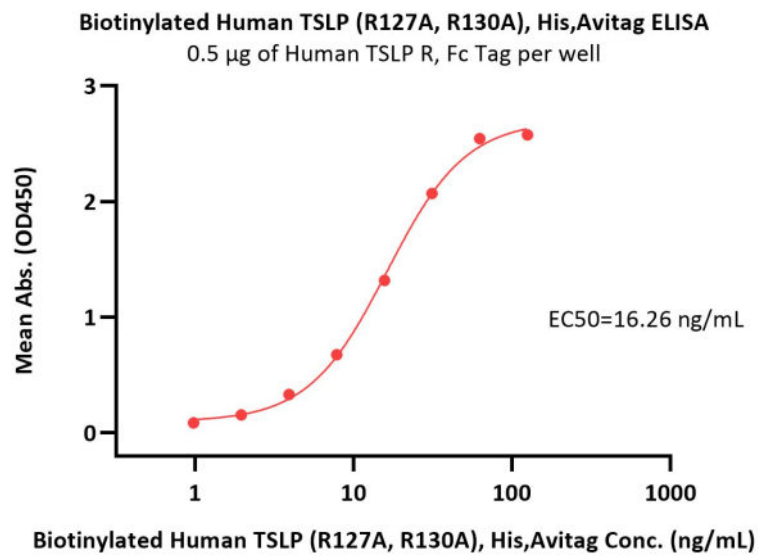


The purity of Biotinylated Human TSLP (R127A, R130A) Protein, His,Avitag (Cat. No. TSP-H82E0) is more than 90% and the molecular weight of this protein is around 22-32 kDa verified by SEC-MALS.

[Report](#)

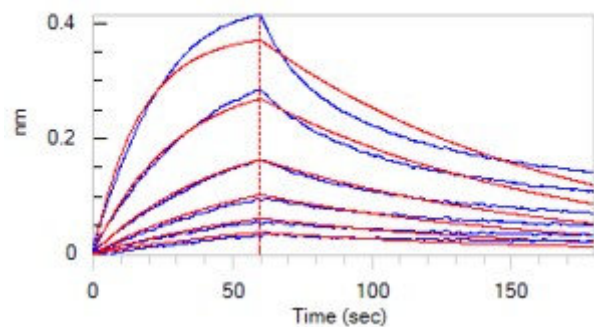
Discounts, Gifts,  
and more!





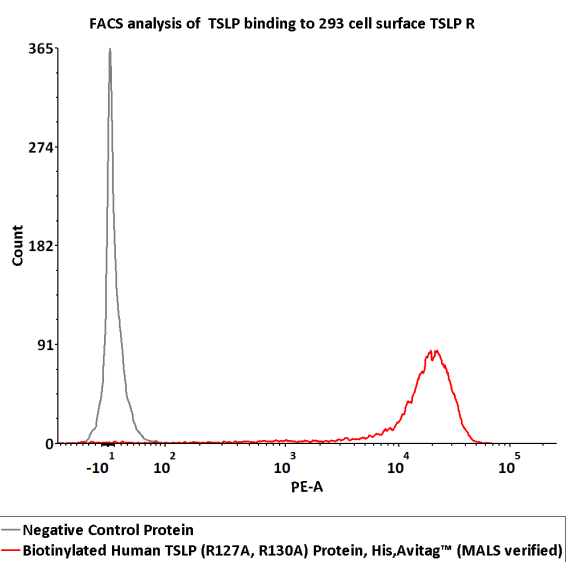
Immobilized Human TSLP R, Fc Tag (Cat. No. TSR-H525a) at 5 µg/mL (100 µL/well) can bind Biotinylated Human TSLP (R127A, R130A), His,Avitag (Cat. No. TSP-H82E0) with a linear range of 2-31 ng/mL (QC tested).

### Bioactivity-BLI



Loaded Human TSLP R, Fc Tag (Cat. No. TSR-H525a) on Protein A Biosensor, can bind Biotinylated Human TSLP (R127A, R130A) Protein, His,Avitag (Cat. No. TSP-H82E0) with an affinity constant of 9.67 nM as determined in BLI assay (ForteBio Octet R8) (Routinely tested).

### Bioactivity-FACS



2e5 of Human TSLP R (Luc) HEK293 Reporter Cells were stained with 100 µL of 1 µg/mL of Biotinylated Human TSLP (R127A, R130A) Protein, His,Avitag (Cat. No. TSP-H82E0) and negative control protein respectively,

Discounts, Gifts,  
and more!





washed and then followed by PE-SA and analyzed with FACS (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<sup>+</sup> dendritic cells are the most obviously characterized target cells.

### **Clinical and Translational Updates**

**Discounts, Gifts,  
and more!**

