

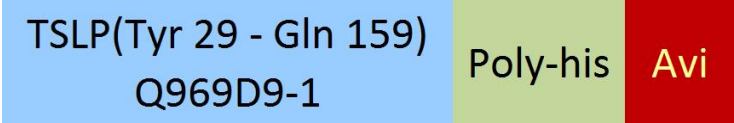
Synonym

TSLP

Source

Biotinylated Human TSLP, His,Avitag(TSP-H82Eb) is expressed from human 293 cells (HEK293). It contains AA Tyr 29 - Gln 159 (Accession # [Q969D9-1](#)). 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 18.6 kDa. The protein migrates as 22-28 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under non-reducing (NR) 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.

Purity

>85% as determined by SDS-PAGE.

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

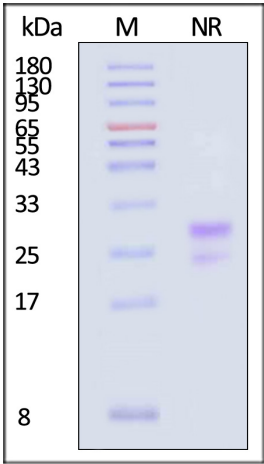
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

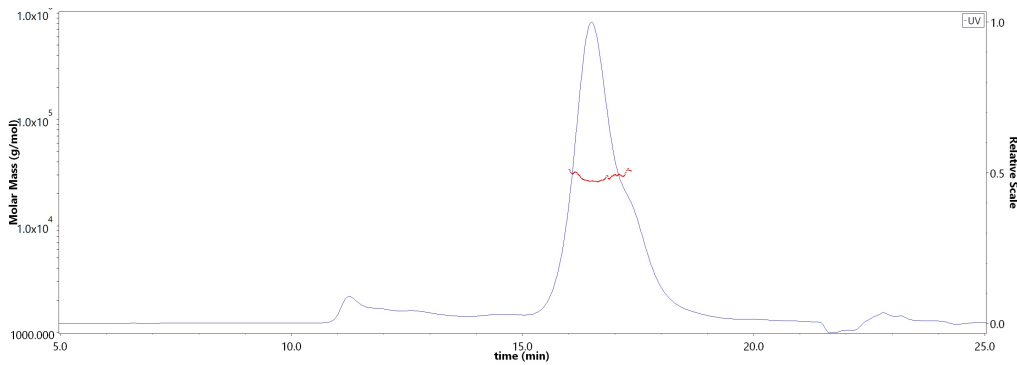
SDS-PAGE



Biotinylated Human TSLP, His,Avitag on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 85% (With [Star Ribbon Pre-stained Protein Marker](#)).

Bioactivity-ELISA

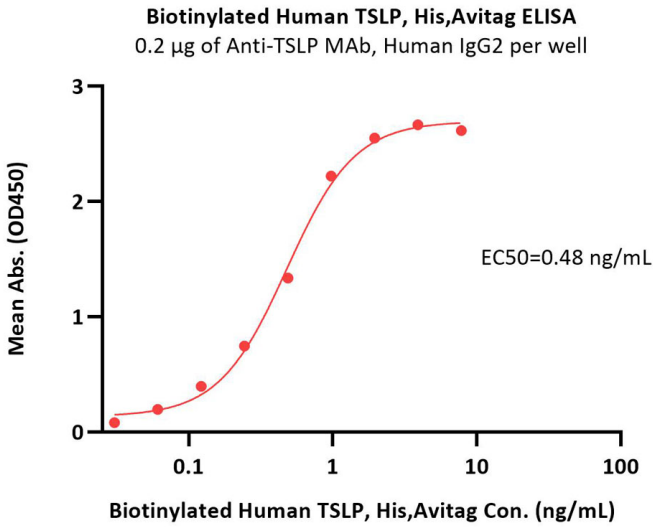
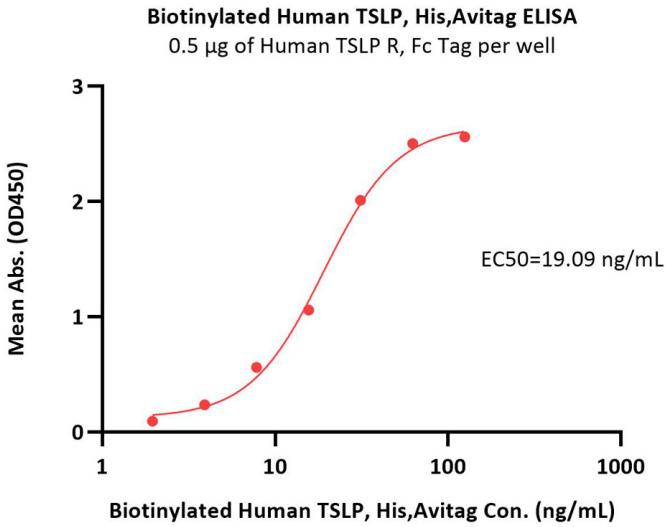
SEC-MALS



The purity of Biotinylated Human TSLP, His,Avitag (Cat. No. TSP-H82Eb) is more than 85% and the molecular weight of this protein is around 23-33 kDa verified by SEC-MALS.

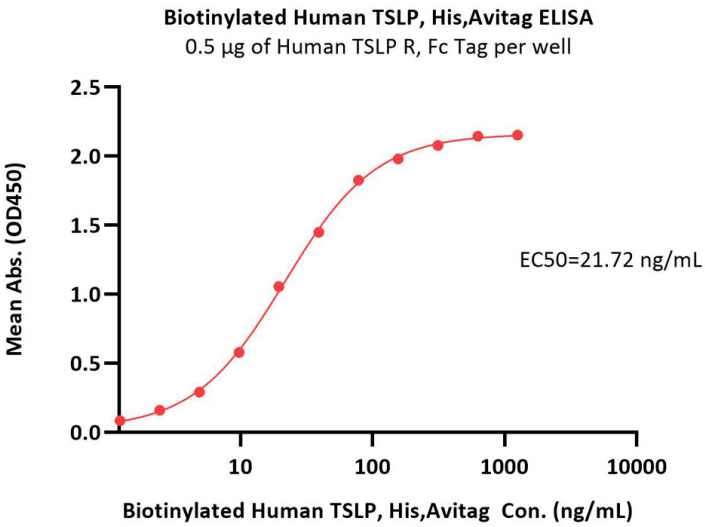
[Report](#)





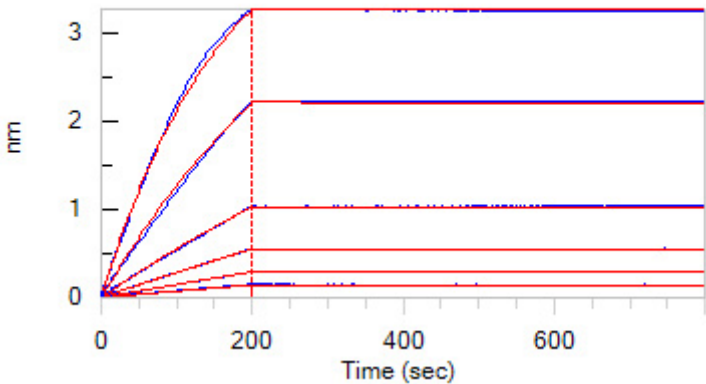
Immobilized Human TSLP R, Fc Tag (Cat. No. TSR-H525a) at 5 µg/mL (100 µL/well) can bind Biotinylated Human TSLP, His,Avitag (Cat. No. TSP-H82Eb) with a linear range of 4-31 ng/mL (QC tested).

Immobilized Anti-TSLP MAb, Human IgG2 at 2 µg/mL (100 µL/well) can bind Biotinylated Human TSLP, His,Avitag (Cat. No. TSP-H82Eb) with a linear range of 0.1-2 ng/mL (Routinely tested).

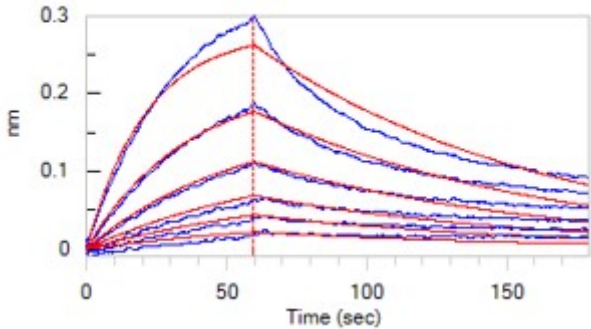


Immobilized Biotinylated Human TSLP, His,Avitag (Cat. No. TSP-H82Eb) at 2 µg/mL (100 µL/well) via precoated 5 µg/mL (100 µL/well) of Human TSLP R, Fc Tag (Cat. No. TSR-H525a), can bind Human IL-7 R alpha, Mouse IgG2a Fc Tag (Cat. No. IL7-H5258) with a linear range of 1-20 ng/mL (Routinely tested).

Bioactivity-BLI



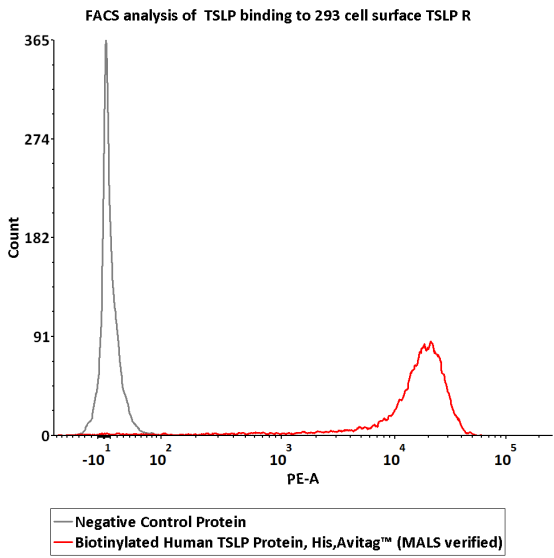
Loaded Biotinylated Human TSLP, His,Avitag (Cat. No. TSP-H82Eb) on SA Biosensor, can bind Monoclonal Anti-Human TSLP Antibody, Human IgG2 with an affinity constant of 15.2 pM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Human TSLP R, Fc Tag (Cat. No. TSR-H525a) on Protein A Biosensor, can bind Biotinylated Human TSLP, His,Avitag (Cat. No. TSP-H82Eb) with an affinity constant of 13.2 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 μ L of 1 μ g/mL of Biotinylated Human TSLP Protein, His,Avitag (Cat. No. TSP-H82Eb) and negative control protein respectively, 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+ dendritic cells are the most obviously characterized target cells.

