

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 (AvitagTM).

The protein has a calculated MW of 18.6 kDa. The protein migrates as 22-28 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under non-reducing (NR) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using AvitagTM 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

>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

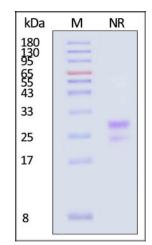
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

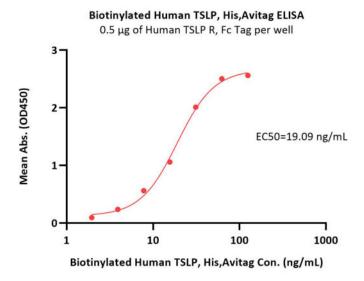


Biotinylated Human TSLP, His, Avitag on SDS-PAGE under non-reducing (NR) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 85% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

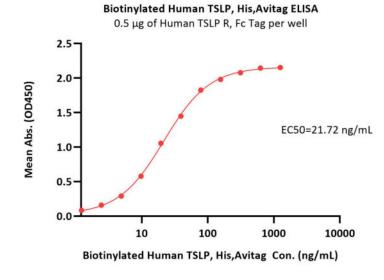
Bioactivity-ELISA





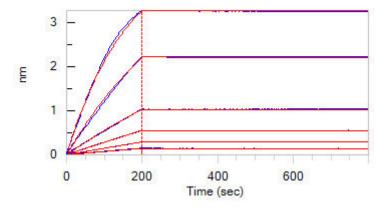


Immobilized Human TSLP R, Fc Tag (Cat. No. TSR-H525a) at 5 μ g/mL (100 μ L/well) can bind Biotinylated Human TSLP, His,Avitag (Cat. No. TSP-H82Eb) with a linear range of 4-31 ng/mL (QC tested).

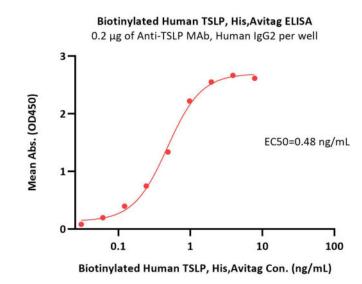


Immobilized Biotinylated Human TSLP, His,Avitag (Cat. No. TSP-H82Eb) at 2 μ g/mL (100 μ L/well) via precoated 5 μ g/mL (100 μ L/well) of Human TSLP R, Fc Tag (Cat. No. TSR-H525a), can bind Human IL-7 R alpha, Mouse IgG2a Fc Tag (Cat. No. IL7-H5258) with a linear range of 1-20 ng/mL (Routinely tested).

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).



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



Biotinylated Human TSLP Protein, His,Avitag™

Catalog # TSP-H82Eb



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.

Clinical and Translational Updates

