

Synonym

TSLP

Source

Human TSLP Protein (R127A, R130A), His Tag(TSP-H5243) is expressed from human 293 cells (HEK293). It contains AA Tyr 29 - Gln 159 (Accession # Q969D9-1 (R127A, R130A)).

Predicted N-terminus: His

Molecular Characterization

Poly-his TSLP (Tyr 29- Gln 159)
Q969D9-1

This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 16.6 kDa. The protein migrates as 20-30 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

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 $0.22~\mu m$ 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

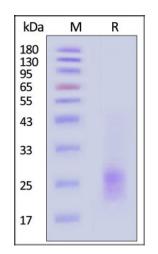
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

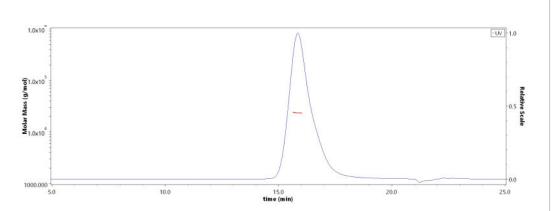
SDS-PAGE



Human TSLP Protein (R127A, R130A), His 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 <u>Star Ribbon Pre-stained Protein Marker</u>).

Bioactivity-ELISA

SEC-MALS

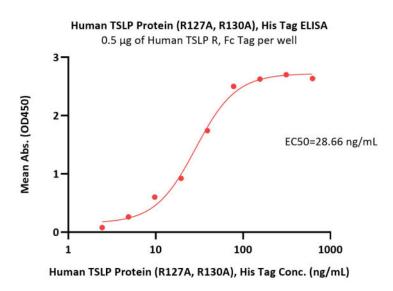


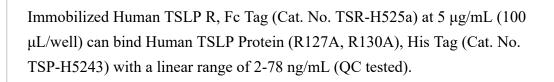
The purity of Human TSLP Protein (R127A, R130A), His Tag (Cat. No. TSP-H5243) is more than 90% and the molecular weight of this protein is around 19-27 kDa verified by SEC-MALS.

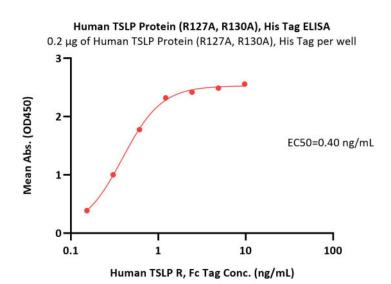
Report





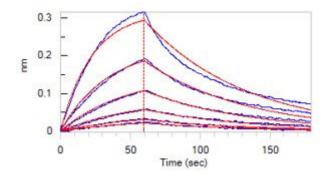






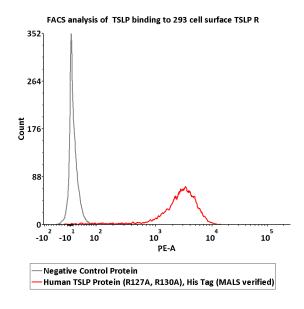
Immobilized Human TSLP Protein (R127A, R130A), His Tag (Cat. No. TSP-H5243) at 2 μ g/mL (100 μ L/well) can bind Human TSLP R, Fc Tag (Cat. No. TSR-H525a) with a linear range of 0.15-0.6 ng/mL (Routinely tested).

Bioactivity-BLI



Loaded Human TSLP R, Fc Tag (Cat. No. TSR-H525a) on Protein A Biosensor, can bind Human TSLP Protein (R127A, R130A), His Tag (Cat. No. TSP-H5243) with an affinity constant of 23 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 Human TSLP Protein (R127A, R130A), His Tag (Cat. No. TSP-H5243) and negative control protein respectively, washed and then



Human TSLP Protein (R127A, R130A), His Tag (MALS verified)

Catalog # TSP-H5243



followed by PE anti-His Tag Antibody 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.

Clinical and Translational Updates

