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

Catalog # TSP-H52Ha



Synonym

TSLP

Source

Human TSLP (R127A, R130A) Protein, His Tag(TSP-H52Ha) 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

TSLP (Tyr 29 - Gln 159) Q969D9-1

Poly-his

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

The protein has a calculated MW of 16.7 kDa. The protein migrates as 25-29 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 / 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

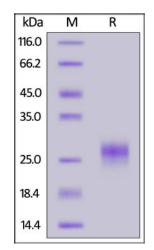
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

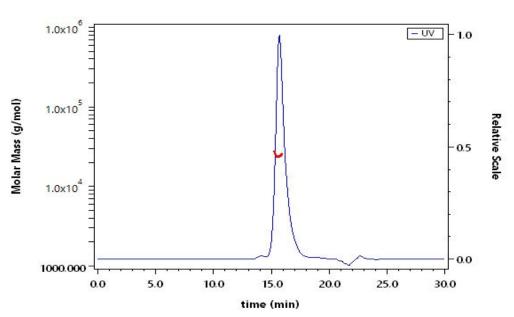
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human TSLP (R127A, R130A) Protein, 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>).

SEC-MALS



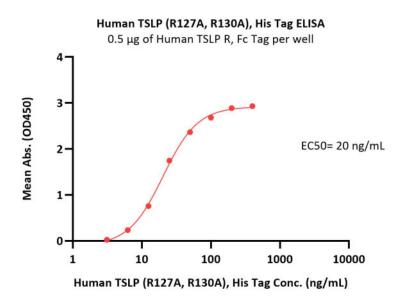
The purity of Human TSLP (R127A, R130A) Protein, His Tag (Cat. No. TSP-H52Ha) is more than 90% and the molecular weight of this protein is around 18-26 kDa verified by SEC-MALS.

Report

Bioactivity-ELISA





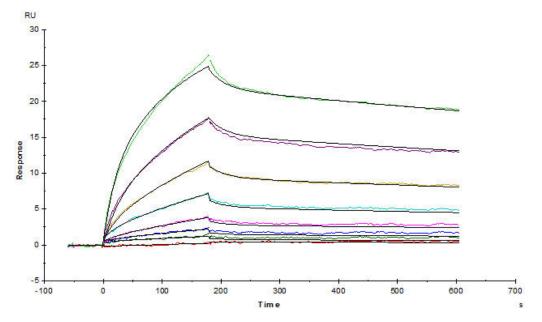


Immobilized Human TSLP R, Fc Tag (Cat. No. TSR-H525a) at 5 μ g/mL (100 μ L/well) can bind Human TSLP (R127A, R130A), His Tag (Cat. No. TSP-H52Ha) with a linear range of 3-50 ng/mL (QC tested).

Human TSLP (R127A, R130A) Protein, His Tag ELISA 0.1 μg of Human TSLP (R127A, R130A) Protein, His Tag per well 2 EC50=1.50 ng/mL Anti-TSLP, Human IgG2 Con. (ng/mL)

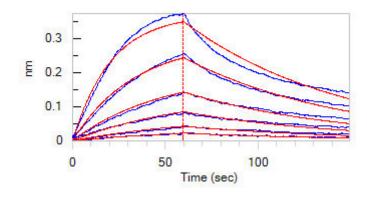
Immobilized Human TSLP (R127A, R130A), His Tag (Cat. No. TSP-H52Ha) at 1 μ g/mL (100 μ L/well) can bind Anti-TSLP, Human IgG2 with a linear range of 0.2-3 ng/mL (Routinely tested).

Bioactivity-SPR

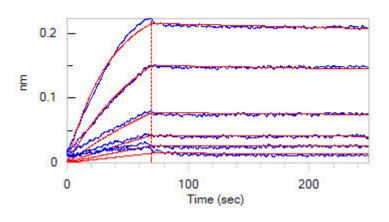


Captured Human TSLP (R127A, R130A), His Tag (Cat. No. TSP-H52Ha) on CM5 Chip via anti-His antibody, can bind Human TSLP R, Fc Tag (Cat. No. TSR-H525a) with an affinity constant of 4.22 nM as determined in SPR assay (Biacore T200) (Routinely tested).

Bioactivity-BLI



Loaded Human TSLP R, Fc Tag (Cat. No. TSR-H525a) on Protein A Biosensor, can bind Human TSLP (R127A, R130A), His Tag (Cat. No. TSP-



Loaded Monoclonal Anti-Human TSLP Antibody, Human IgG2 on AHC Biosensor, can bind Human TSLP (R127A, R130A), His Tag (Cat. No. TSP-



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

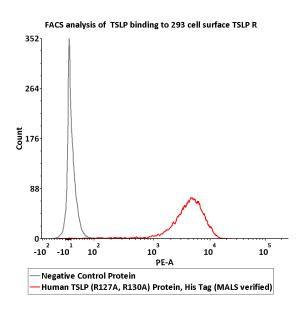
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H52Ha) with an affinity constant of 16 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

H52Ha) with an affinity constant of 0.153 nM as determined in BLI assay (ForteBio Octet Red96e) (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 (R127A, R130A) Protein, His Tag (Cat. No. TSP-H52Ha) and negative control protein respectively, washed and then 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.