Human IL-7 R alpha&TSLP R Heterodimer Protein, Fc Tag&Fc Tag (MALS verified)

Catalog # ILR-H5255

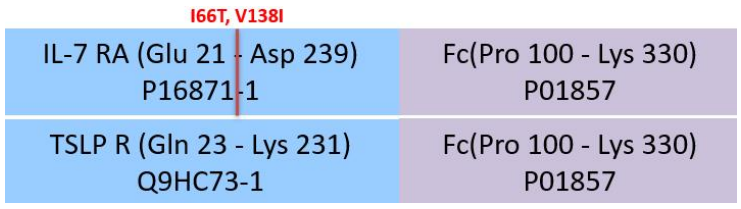
Synonym

IL7Ra,CD127,TSLP R,CRLF2,IL-XR,ILXR,p2RY8,CRLF2 fusion,TSLP receptor,TSLPR,CRL2,CRLF2Y,Cytokine receptor-like 2

Source

Human IL-7 RA&TSLP R Heterodimer Protein, Fc Tag&Fc Tag(ILR-H5255) is expressed from human 293 cells (HEK293). It contains AA Glu 21 - Asp 239 (IL-7 RA) & Gln 23 - Lys 231 (TSLP R) (Accession # P16871-1 (I66T, V138I) (IL-7RA) & Q9HC73-1 (TSLPR)).
Predicted N-terminus: Glu 21 (IL-7 RA) & Gln 23 (TSLP R)

Molecular Characterization



Human IL-7 RA&TSLP R Heterodimer Protein, Fc Tag&Fc Tag is produced by co-expression of IL-7 RA and TSLP R, has a calculated MW of 51.7 kDa (IL-7 RA) and 50.3 kDa (TSLP R). Subunit IL-7 RA is fused with a human IgG1 Fc fragment at the C-terminus and subunit TSLP R is fused with a human IgG1 Fc fragment at the C-terminus. The reducing (R) protein migrates as 60-80 kDa due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% 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

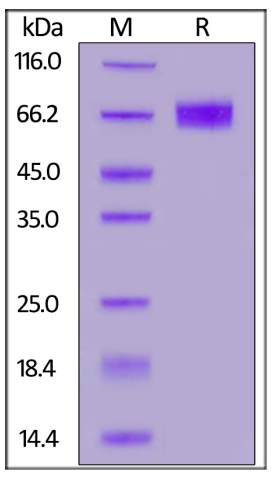
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

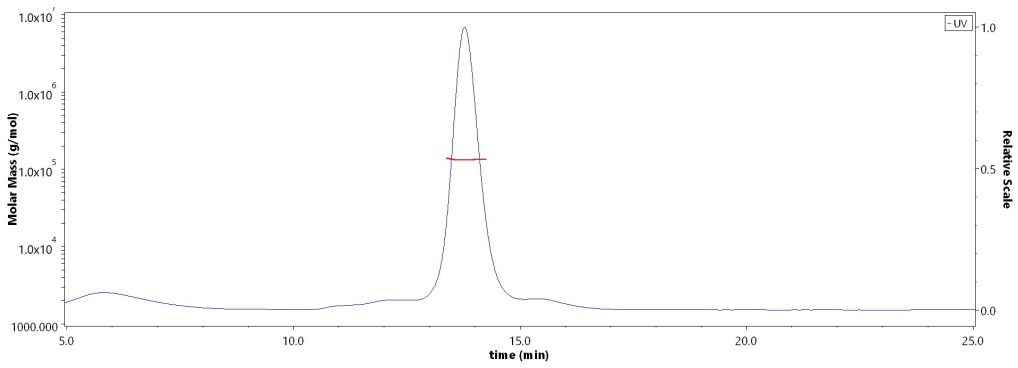
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human IL-7 RA&TSLP R Heterodimer Protein, Fc Tag&Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS

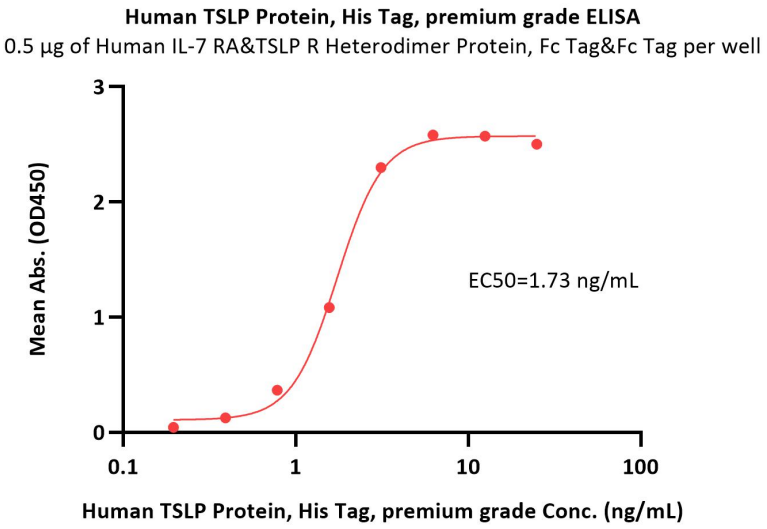


The purity of Human IL-7 RA&TSLP R Heterodimer Protein, Fc Tag&Fc Tag (Cat. No. ILR-H5255) is more than 85% and the molecular weight of this protein is around 125-140 kDa verified by SEC-MALS.
Report

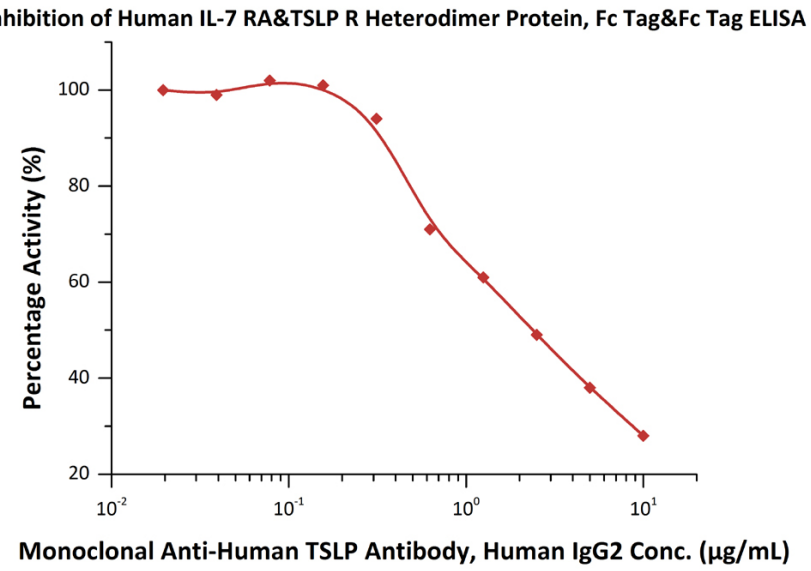
Bioactivity-ELISA

Human IL-7 R alpha&TSLP R Heterodimer Protein, Fc Tag&Fc Tag (MALS verified)

Catalog # ILR-H5255

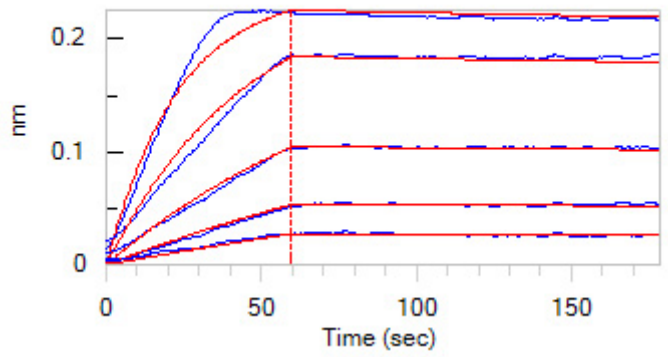


Immobilized Human IL-7 RA&TSLP R Heterodimer Protein, Fc Tag&Fc Tag (Cat. No. ILR-H5255) at 5 μg/mL (100 μL/well) can bind Human TSLP Protein, His Tag, premium grade (Cat. No. TSP-H52Hb) with a linear range of 0.4-3 ng/mL (QC tested).



Serial dilutions of Monoclonal Anti-Human TSLP Antibody, Human IgG2 were added into Human IL-7 RA&TSLP R Heterodimer Protein, Fc Tag&Fc Tag (Cat. No. ILR-H5255): Biotinylated Human TSLP, His,Avitag (Cat. No. TSP-H82Eb) binding reactions. The half maximal inhibitory concentration (IC50) is 1.09688 μg/mL (Routinely tested).

Bioactivity-BLI



Loaded Human IL-7 RA&TSLP R Heterodimer Protein, Fc Tag&Fc Tag (Cat. No. ILR-H5255) on Protein A Biosensor, can bind Human TSLP Protein, His Tag, premium grade (Cat. No. TSP-H52Hb) with an affinity constant of 134 pM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

TSLP is a pleiotropic cytokine originally characterized as a lymphocyte growth factor. Thymic stromal lymphopoietin (TSLP) is overexpressed in the airways of severe asthmatics and is an upstream cytokine that orchestrates inflammatory responses in asthma. Human TSLP exerts its biological activities by binding to a high-affinity heteromeric receptor complex composed of TSLPR and IL- 7 receptor and initiates signaling in cells co-expressing TSLPR and IL-7R.