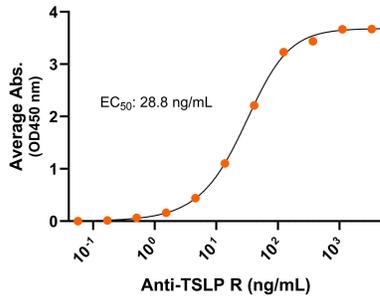


Bioactivity – Antibody Binding

Mouse IL-7R α -His/TSLP R-Strep Heterodimer, ELISA

0.2 μ g of IL-7R α /TSLP R protein heterodimer per well

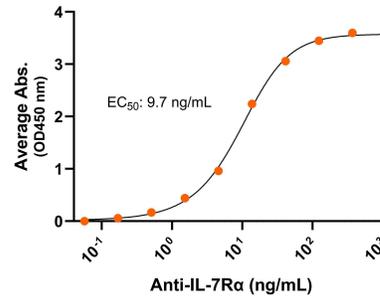


Immobilized human IL-7R α /TSLP R protein heterodimer, His and Strep-tag (CSP-25242-A1B6) at 2 μ g/mL (100 μ L/well) can bind anti-human TSLP R monoclonal antibody with half maximal effective concentration (EC50) range of 14.4-57.5 ng/mL (QC tested).

Bioactivity – Antibody Binding

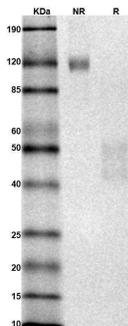
Mouse IL-7R α -His/TSLP R-Strep Heterodimer, ELISA

0.2 μ g of IL-7R α /TSLP R protein heterodimer per well



Immobilized human IL-7R α /TSLP R protein heterodimer, His and Strep-tag (CSP-25242-A1B6) at 2 μ g/mL (100 μ L/well) can bind anti-human IL-7R α polyclonal antibody with half maximal effective concentration (EC50) range of 4.9-19.5 ng/mL (QC tested).

SDS-PAGE



MW: Molecular Weight marker reduced condition
 NR: IL-7R α /TSLP R heterodimer under non-reduced condition
 R: IL-7R α /TSLP R heterodimer under reduced condition

The migration range of the heterodimer protein with glycosylation under non-reducing condition is ~120 kDa and under reducing condition between 40 kDa for TSLP R chain and 50 kDa for IL-7R α chain on SDS PAGE.



Mouse IL-7R α /TSLP R Protein Heterodimer, His and Strep Tag
Product Code: CSP-25242-A1B6
For Research Use Only (RUO)

Expression Host
HEK293T

Purity
Greater than 90% dimer form as determined by SDS-PAGE under non-reducing condition

Protein Construct
IL-7R α /TSLP R heterodimer protein contains an IL-7R α extracellular domain (UniProt# P16872, amino acids Glu21-Asp239) and a TSLP R extracellular domain (UniProt# Q8CII9, amino acids Ala20-Pro232) fused with a proprietary dimer motif followed by a His tag at the IL-7R α C-terminus and a Strep tag at the TSLP R C-terminus. Expressed in HEK293T cell line.

SDS-Page Molecular Weight
63 kDa. The migration range of the heterodimer protein with glycosylation under non-reducing condition is ~120 kDa and under reducing condition between 40 kDa for TSLP R chain and 50 kDa for IL-7R α chain on SDS PAGE.

Shipping Conditions
Frozen Dry Ice

Protein Name
IL-7R α / TSLP R

Alternate Name(s)
Cluster of Differentiation 127, CD127, IL7R, CD127, CDW127, IL-7R-alpha, IL7RA, ILRA, Interleukin-7 receptor- α , interleukin 7 receptor, IL7R- α , Cytokine receptor-like factor 2, CRLF2, CRL2, CRLF2Y, TSLPR

Amino Acid Range
AA: E21-D239 ; BA: A20-P232

Formulation
0.22 μ m filtered PBS, pH 7.4

Stability & Storage
-80 $^{\circ}$ C

Background

Interleukin-7 receptor subunit alpha (IL-7R α) and thymic stromal lymphopoietin receptor (TSLP R) compose a protein heterodimeric receptor complex that binds the pro-inflammatory cytokine TSLP. IL-7R α , also known as Cluster of Differentiation 127 (CD127), is a transmembrane receptor belonging to the cytokine receptor homology class 1 (CRH1) family with an extracellular domain consisting of two fibronectin type III (FNIII) domains (D1 and D2). TSLP R, also known as Cytokine receptor-like factor 2 (CRLF2), contains an extracellular domain consisting of a single CRH module composed of two tandem fibronectin type III (FNIII) domains (D1 and D2). The IL-7R α /TSLP R heterodimer is central to the development of widespread allergic diseases, including asthma and atopic dermatitis, making it an attractive therapeutic target. While structurally and functionally similar to human IL-7R α /TSLP R heterodimer, mouse IL-7R α /TSLP R heterodimer is a species-specific tool essential for preclinical studies, basic research, and translational research in cancer immunotherapy.