Synonym

CD217,CDw217,IL-17RA,IL17R,CANDF5,hIL-17R

Source

Human IL-17 RA Protein, Fc Tag(ILA-H5257) is expressed from human 293 cells (HEK293). It contains AA Leu 33 - Trp 320 (Accession # Q96F46-1).
Predicted N-terminus: Leu 33

Molecular Characterization

IL-17 RA(Leu 33 - Trp 320) Q96F46-1	Fc(Pro 100 - Lys 330) P01857

This protein carries a human IgG1 Fc tag at the C-terminus

The protein has a calculated MW of 60.1 kDa. The protein migrates as 71-90 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in
Tris with Glycine, Arginine and NaCl, pH7.5 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

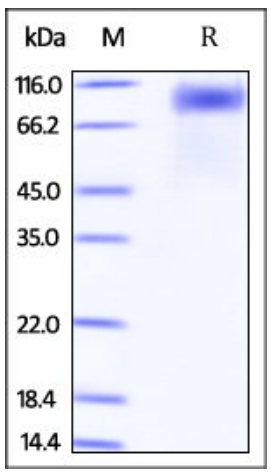
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

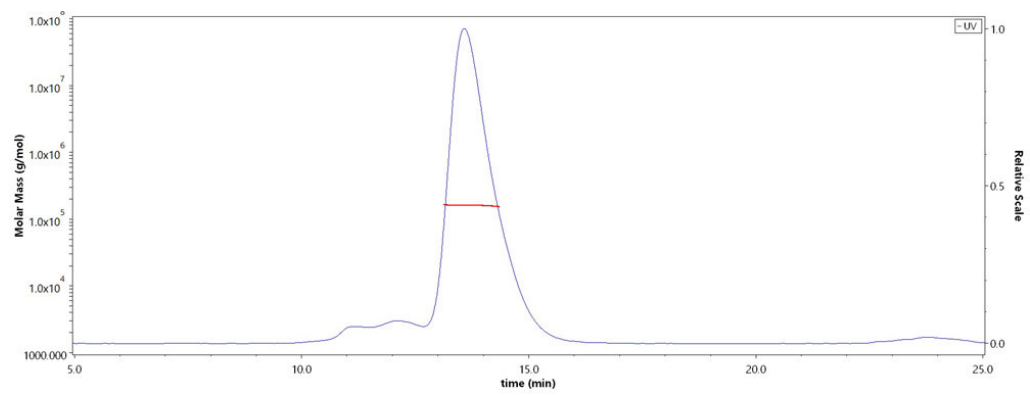
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



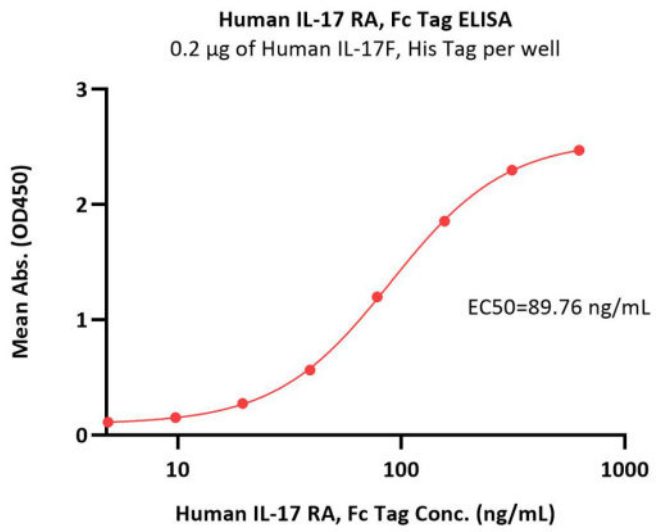
Human IL-17 RA Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS



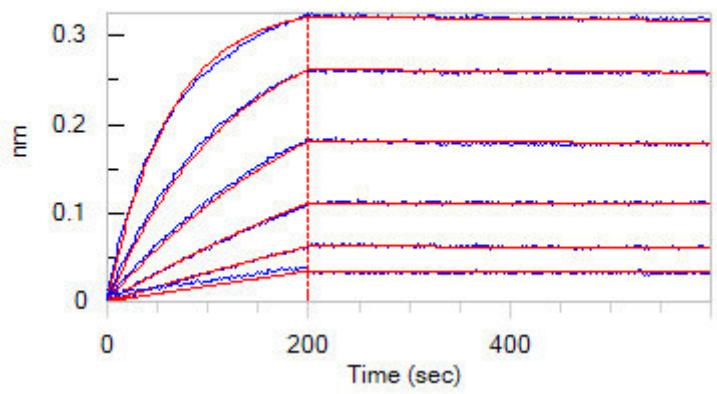
The purity of Human IL-17 RA Protein, Fc Tag (Cat. No. ILA-H5257) is more than 85% and the molecular weight of this protein is around 150-170 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA

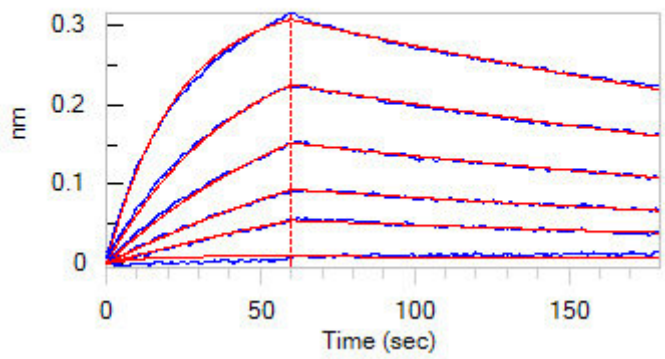


Immobilized Human IL-17F, His Tag (Cat. No. ILF-H5244) at 2 µg/mL (100 µL/well) can bind Human IL-17 RA Protein, Fc Tag (Cat. No. ILA-H5257) with a linear range of 5-156 ng/mL (QC tested).

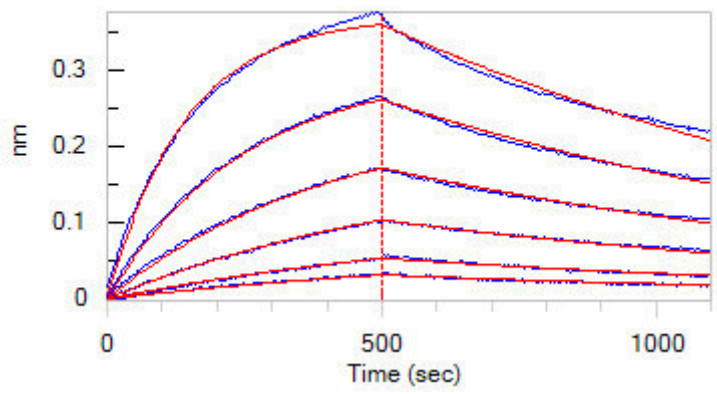
Bioactivity-BLI



Loaded Human IL-17 RA Protein, Fc Tag (Cat. No. ILA-H5257) on Protein A Biosensor, can bind Human IL17A, Tag Free with an affinity constant of 0.21 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Human IL-17 RA Protein, Fc Tag (Cat. No. ILA-H5257) on Protein A Biosensor, can bind Human IL-17A&IL-17F Heterodimer Protein, His Tag&Strep II Tag with an affinity constant of 34.4 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Human IL-17 RA Protein, Fc Tag (Cat. No. ILA-H5257) on Protein A Biosensor, can bind Human IL-17F (H161R), His Tag (Cat. No. ILF-H4240) with an affinity constant of 299 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Interleukin 17 receptor A (IL17RA) is also known as cluster of differentiation w217 (CDw217), is a pro-inflammatory cytokine secreted by activated T-lymphocytes, belong to ubiquitous type I membrane glycoprotein, and binds with low affinity to interleukin 17A (IL17A). IL 17R mRNA exhibits a broad tissue distribution, and has been detected in virtually all cells and tissues tested . IL 17RA associates with IL 17RC to form a signaling receptor complex for IL 17 and IL 17F . Ligand and IL 17RA ligation promotes T cell activation and the production of IL - 6, G-CSF, SCF, and multiple pro-inflammatory chemokines. Defects in IL17RA are the cause of familial candidiasis type 5 (CANDF5).

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.