

Human IL-17F Protein, His Tag (MALS verified)

Catalog # ILF-H5244



Synonym

IL-17F, Interleukin-17F, Cytokine ML-1

Source

Human IL-17F, His Tag(ILF-H5244) is expressed from human 293 cells (HEK293). It contains AA Arg 31 - Gln 163 (Accession # [Q96PD4-1](#)).  
Predicted N-terminus: His

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus.  
The protein has a calculated MW of 16.8 kDa. The protein migrates as 22-25 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.  
The protein is designed as a dimer.

Endotoxin

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

Purity

>95% 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.

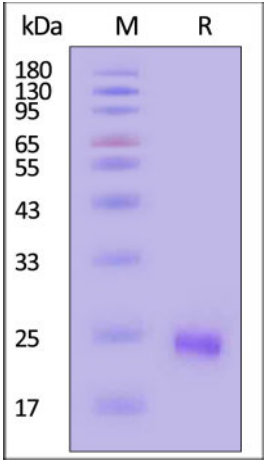
Reconstitution

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

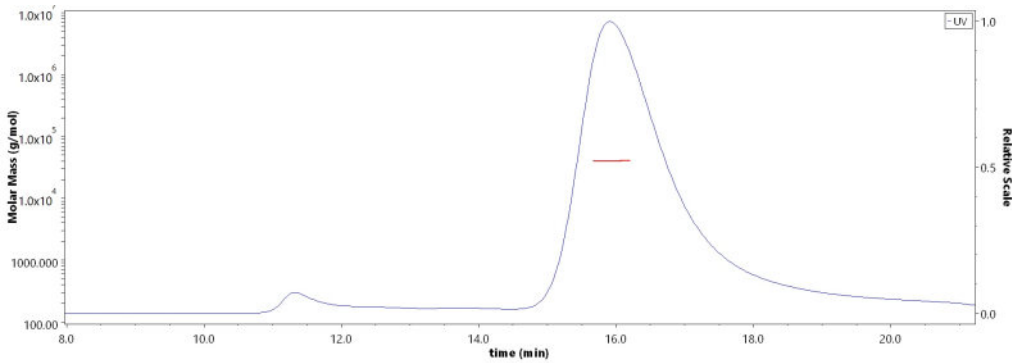
For long term storage, the product should be stored at lyophilized state at -20°C or lower.  
*Please avoid repeated freeze-thaw cycles.*  
This product is stable after storage at:  
• -20°C to -70°C for 12 months in lyophilized state;  
• -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human IL-17F, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



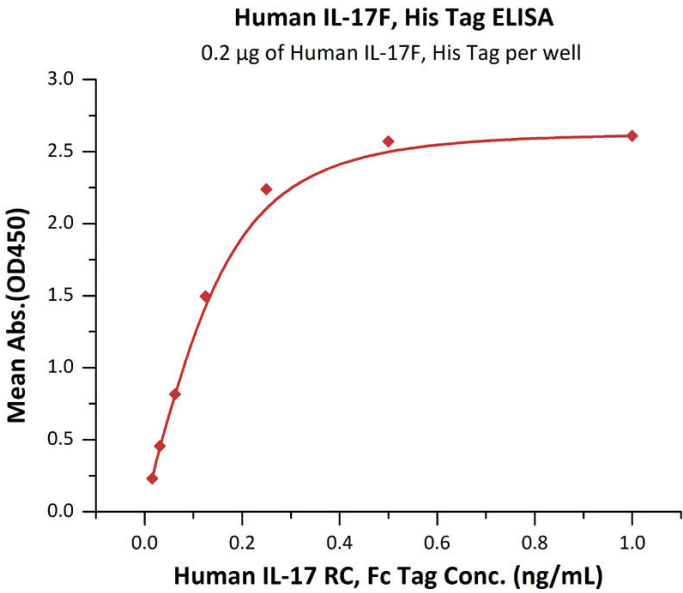
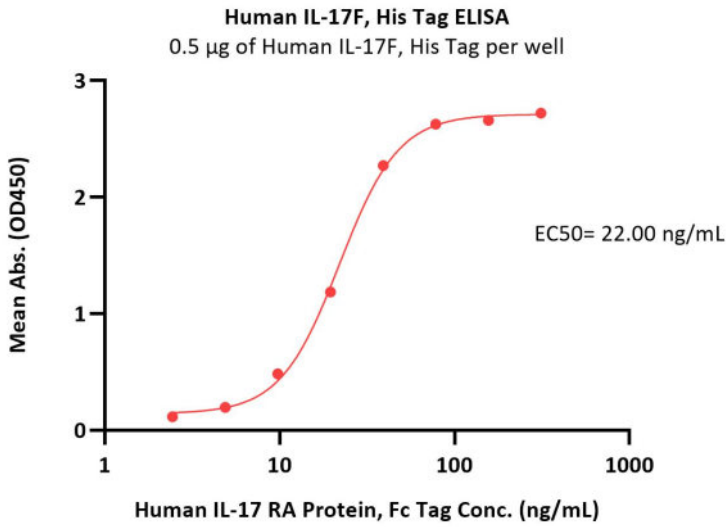
The purity of Human IL-17F, His Tag (Cat. No. ILF-H5244) is more than 90% and the molecular weight of this protein is around 38-48 kDa verified by SEC-MALS.  
[Report](#)

Bioactivity-ELISA



Human IL-17F Protein, His Tag (MALS verified)

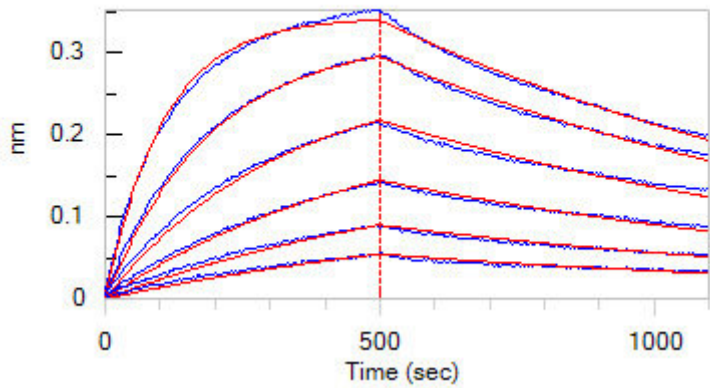
Catalog # ILF-H5244



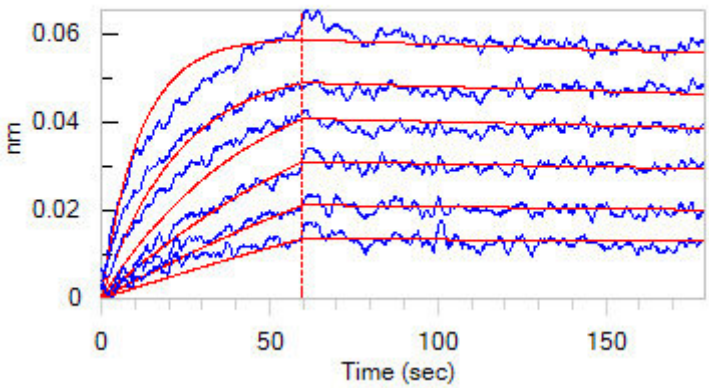
Immobilized Human IL-17F, His Tag (Cat. No. ILF-H5244) at 5 µg/mL (100 µL/well) can bind Human IL-17 RA Protein, Fc Tag (Cat. No. ILA-H525f) with a linear range of 2-39 ng/mL (QC tested).

Immobilized Human IL-17F, His Tag (Cat. No. ILF-H5244) at 2 µg/mL (100 µL/well) can bind Human IL-17 RC, Fc Tag (Cat. No. ILC-H5259) with a linear range of 0.016-0.25 µg/mL (Routinely tested).

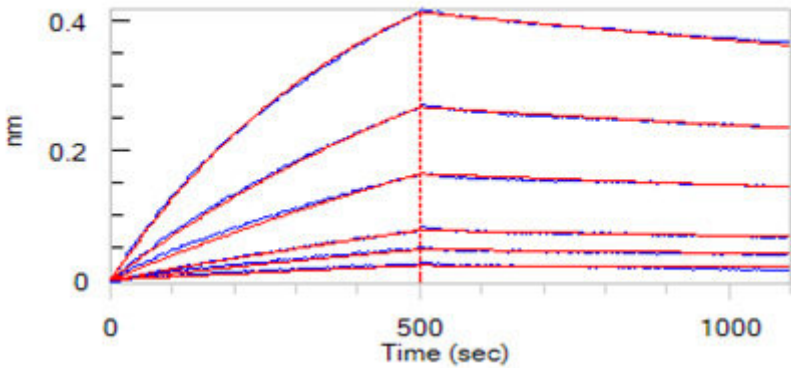
Bioactivity-BLI



Loaded Human IL-17 RA, Fc Tag on Protein A Biosensor, can bind Human IL-17F, His Tag (Cat. No. ILF-H5244) with an affinity constant of 219 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Human IL17RA & IL17RC Protein, Fc Tag&Fc Tag (Cat. No. ILC-H5257) on Protein A Biosensor, can bind Human IL-17F, His Tag (Cat. No. ILF-H5244) with an affinity constant of 1.04 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Human IL-17F, His Tag (Cat. No. ILF-H5244) on NTA Biosensor, can bind Human IL-17 RC, Fc Tag (Cat. No. ILC-H5259) with an affinity constant of 100 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background



Human IL-17F Protein, His Tag (MALS verified)

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Interleukin-17F (IL17F) is also known as Interleukin-24 (IL24), Cytokine ML-1, is a secreted disulfide-linked homodimer which belongs to the IL-17 family. There are at least six members of the IL-17 family in humans and in mice: IL-17A, IL-17B, IL-17C, IL-17D, IL-17E (also called IL-25) and IL-17F (also called IL-24). IL-17 represents a family of structurally related cytokines that share a highly conserved C-terminal region but differ from one another in their N-terminal regions and in their distinct biological roles. IL-17F / IL-24 is expressed in activated, but not resting, CD4+ T-cells and activated monocytes. IL17F / Interleukin-24 stimulates the production of other cytokines such as IL-6, IL-8 and granulocyte colony-stimulating factor, and can regulate cartilage matrix turnover. IL17F / IL-24 stimulates PBMC and T-cell proliferation and Inhibits angiogenesis. Defects in IL17F are the cause of familial candidiasis type 6 (CANDF6).

