



## Synonym

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

## Source

Human IL-17F (H161R), His Tag(ILF-H4240) is expressed from human 293 cells (HEK293). It contains AA Arg 31 - Gln 163 (Accession # [Q96PD4-1](#) (H161R)).

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 20-23 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

Less than 1.0 EU per  $\mu\text{g}$  by the LAL method.

## Purity

>95% as determined by SDS-PAGE.

## Formulation

Lyophilized from 0.22  $\mu\text{m}$  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

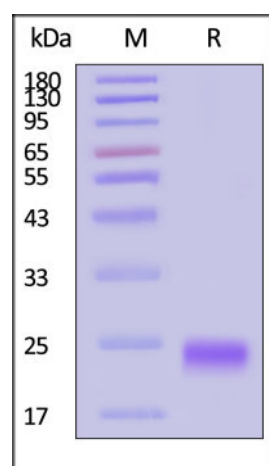
For long term storage, the product should be stored at lyophilized state at  $-20^{\circ}\text{C}$  or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- $-20^{\circ}\text{C}$  to  $-70^{\circ}\text{C}$  for 12 months in lyophilized state;
- $-70^{\circ}\text{C}$  for 3 months under sterile conditions after reconstitution.

## SDS-PAGE



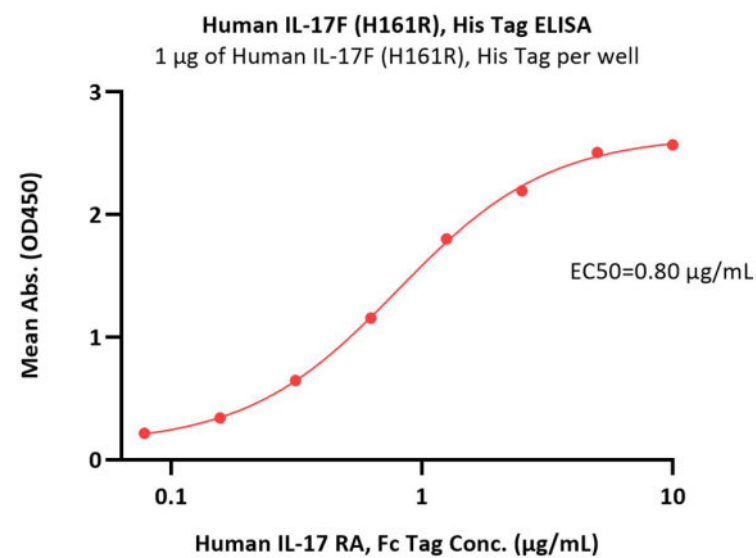
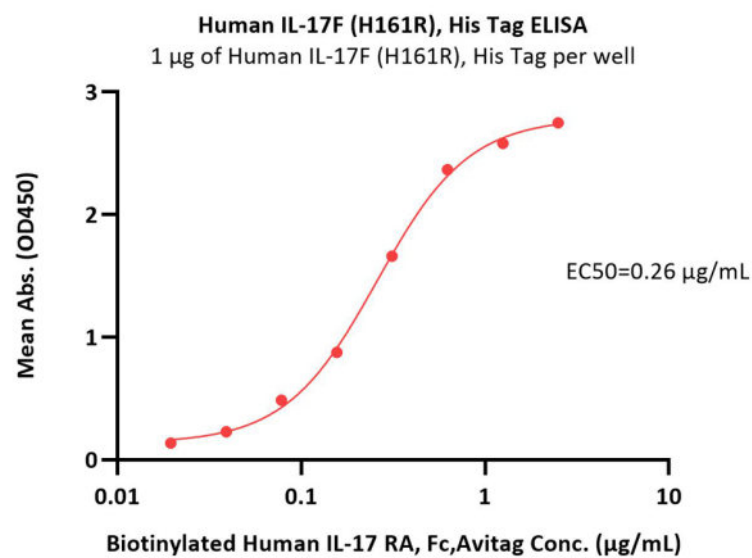
Human IL-17F (H161R), His Tag on SDS-PAGE under reducing (R) condition.

The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

## Bioactivity-ELISA

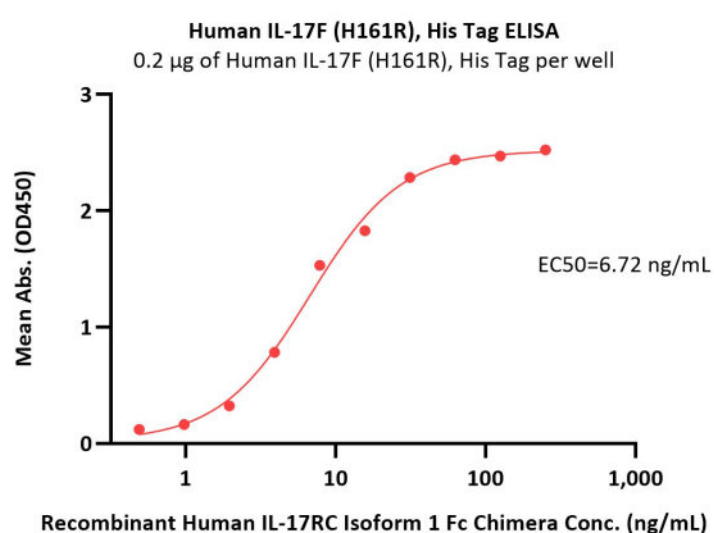
Discounts, Gifts,  
and more!





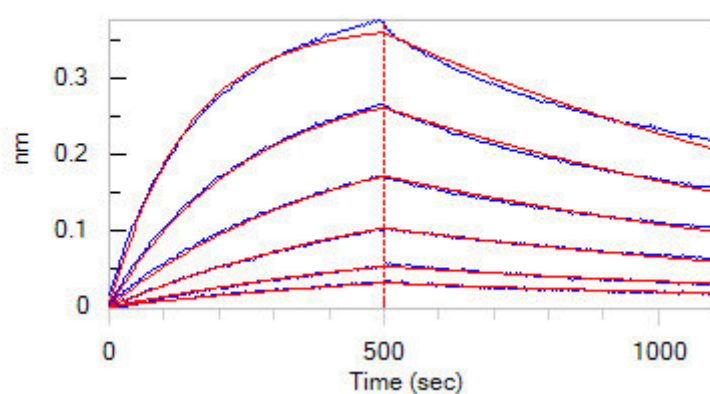
Immobilized Human IL-17F (H161R), His Tag (Cat. No. ILF-H4240) at 10 µg/mL (100 µL/well) can bind Biotinylated Human IL-17 RA, Fc,Avitag (Cat. No. ILA-H82F1) with a linear range of 0.02-0.313 µg/mL (QC tested).

Immobilized Human IL-17F (H161R), His Tag (Cat. No. ILF-H4240) at 10 µg/mL (100 µL/well) can bind Human IL-17 RA, Fc Tag with a linear range of 0.078-1.25 µg/mL (Routinely tested).

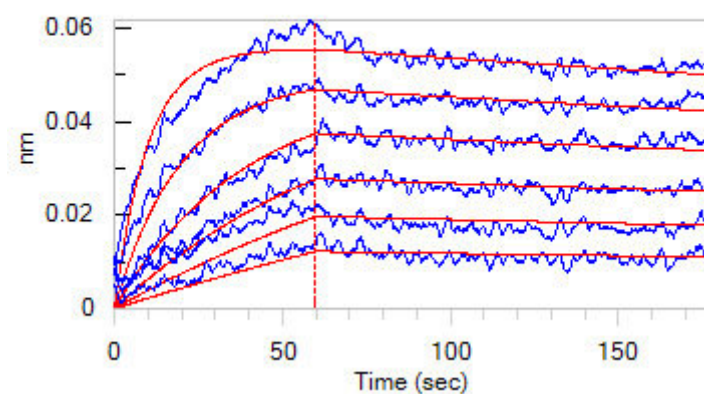


Immobilized Human IL-17F (H161R), His Tag (Cat. No. ILF-H4240) at 2 µg/mL (100 µL/well) can bind Recombinant Human IL-17RC Isoform 1 Fc Chimera with a linear range of 0.2-16 ng/mL (Routinely tested).

## Bioactivity-BLI



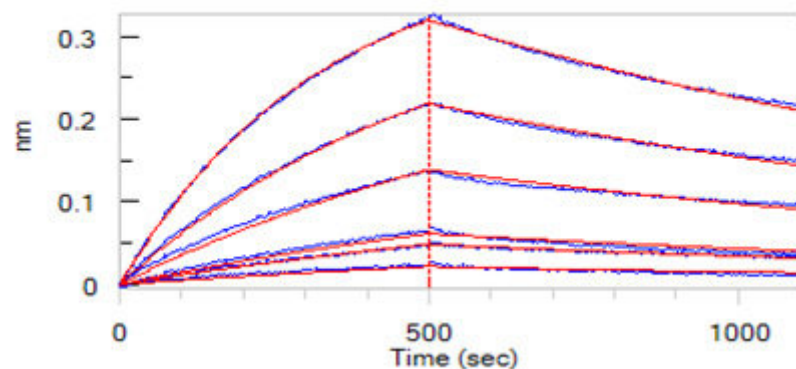
Loaded Human IL-17 RA, Fc Tag on Protein A Biosensor, can bind Human IL-17F (H161R), His Tag (Cat. No. ILF-H4240) with an affinity constant of 299 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Human IL17RA & IL17RC Protein, Fc Tag&Fc Tag (Cat. No. ILC-H5257) on Protein A Biosensor, can bind Human IL-17F (H161R), His Tag (Cat. No. ILF-H4240) with an affinity constant of 1.79 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

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Loaded Human IL-17F (H161R), His Tag (Cat. No. ILF-H4240) on NTA Biosensor, can bind Human IL-17 RC, Fc Tag (Cat. No. ILC-H5259) with an affinity constant of 288 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

## Background

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<sup>+</sup> 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).

## Clinical and Translational Updates

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