

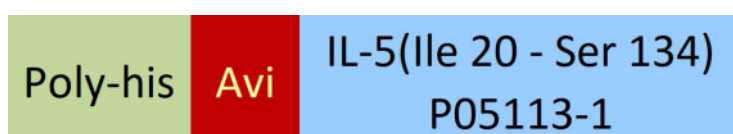
**Synonym**

IL-5, TRF, IL5, Interleukin-5

**Source**

Biotinylated Human IL-5, His,Avitag(IL5-H82Q5) is expressed from human 293 cells (HEK293). It contains AA Ile 20 - Ser 134 (Accession # [P05113-1](#)).

Predicted N-terminus: His

**Molecular Characterization**

This protein carries a polyhistidine tag at the N-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 16.7 kDa. The protein migrates as 20-25 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Labeling**

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

**Protein Ratio**

Passed as determined by the HABA assay / binding ELISA.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>90% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in PBS, pH7.3 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.*

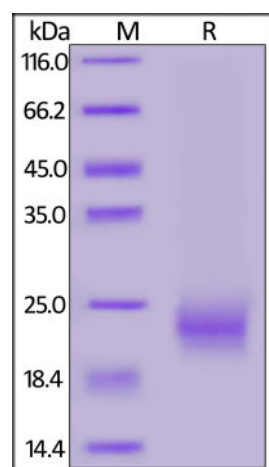
**Storage**

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

*Please avoid repeated freeze-thaw cycles.*

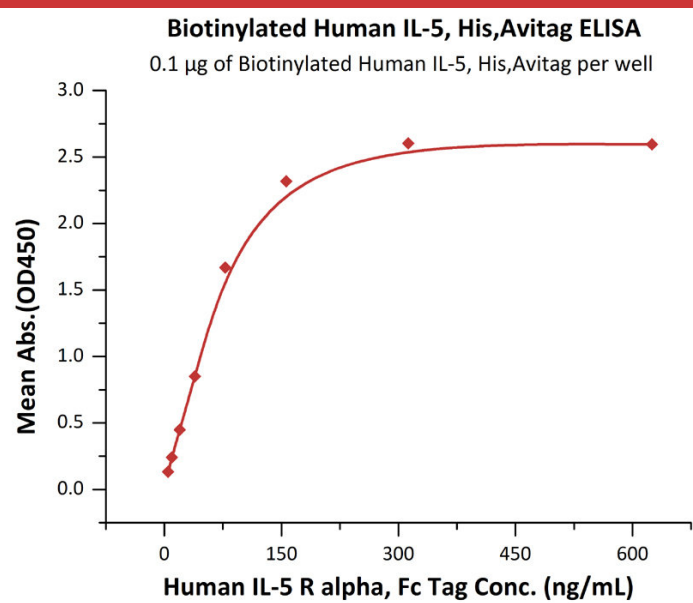
This product is stable after storage at:

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

**SDS-PAGE**

Biotinylated Human IL-5, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-ELISA**



Immobilized Biotinylated Human IL-5, His,Avitag (Cat. No. IL5-H82Q5) at 1 µg/mL (100 µL/well) on Recombinant Streptavidin (Cat. No. STN-N5116 ) precoated (0.5 µg/well) plate, can bind Human IL-5 R alpha, Fc Tag with a linear range of 5-78 ng/mL (QC tested).

## Background

Interleukin 5 (IL5) is an interleukin produced by type-2 T helper cells and mast cells. IL-5 is a 115-amino acid (in human, 133 in the mouse) -long TH2 cytokine that is part of the hematopoietic family. Unlike other members of this cytokine family (namely interleukin 3 and GM-CSF), this glycoprotein in its active form is a homodimer. Interleukin-5 has long been associated with the cause of several allergic diseases including allergic rhinitis and asthma, wherein a large increase in the number of circulating, airway tissue, and induced sputum eosinophils have been observed. Given the high concordance of eosinophils and, in particular, allergic asthma pathology, it has been widely speculated that eosinophils have an important role in the pathology of this disease. Drugs that target IL-5 are mepolizumab and reslizumab.

## Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.