

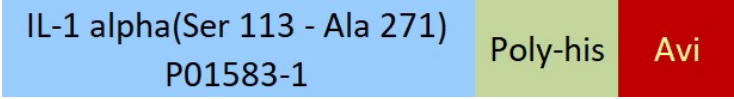
Synonym

IL1A,IL-1 ALPHA,IL1F1,IL1α

Source

Biotinylated Human IL-1 alpha, His,Avitag(ILA-H82E7) is expressed from human 293 cells (HEK293). It contains AA Ser 113 - Ala 271 (Accession # [P01583-1](#)).
Predicted N-terminus: Ser 113

Molecular Characterization



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

The protein has a calculated MW of 21.6 kDa. The protein migrates as 25-28 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.

Purity

>95% as determined by SDS-PAGE.

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.

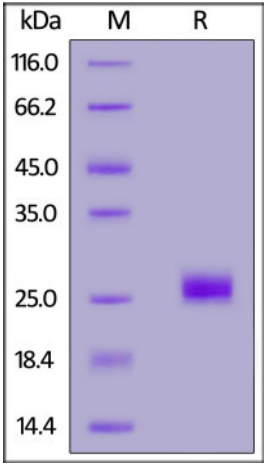
Storage

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:

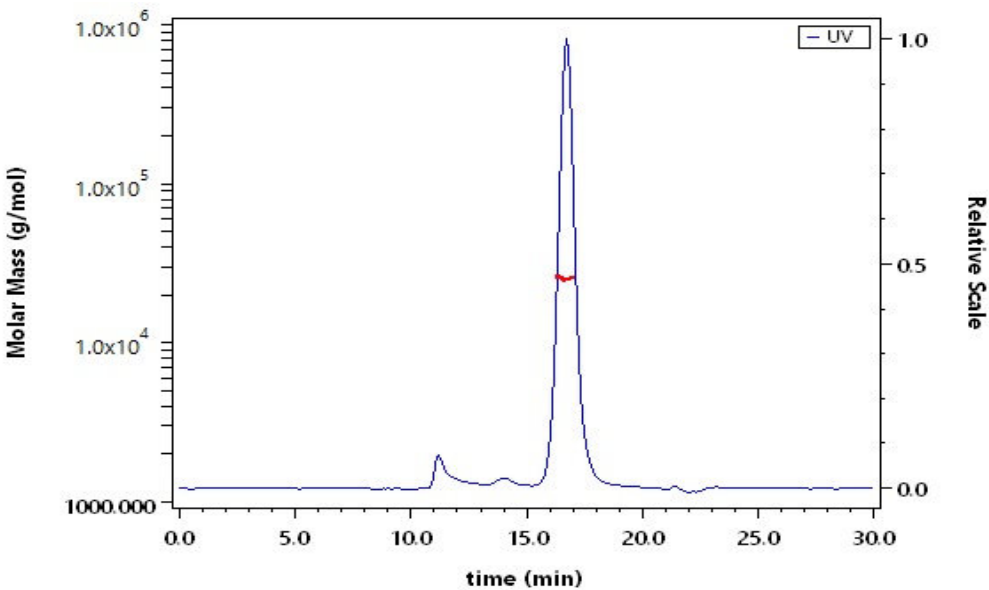
- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human IL-1 alpha, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

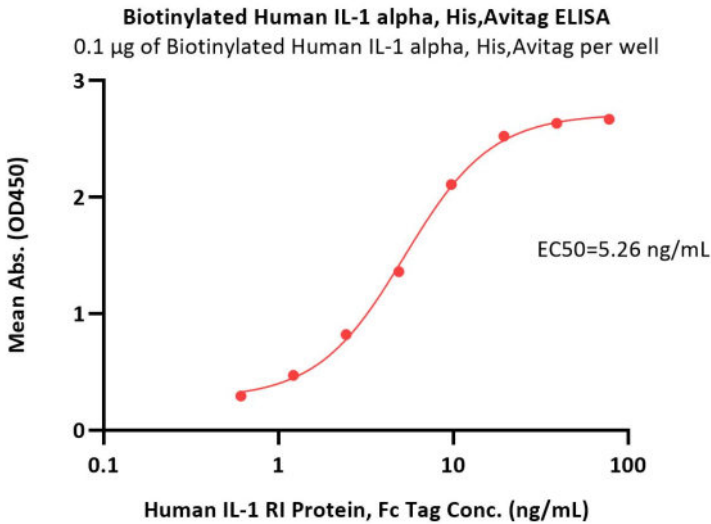
SEC-MALS



The purity of Biotinylated Human IL-1 alpha, His,Avitag (Cat. No. ILA-H82E7) is more than 85% and the molecular weight of this protein is around 20-30 kDa verified by SEC-MALS.
[Report](#)

Bioactivity-ELISA





Immobilized Biotinylated Human IL-1 alpha, His,Avitag (Cat. No. ILA-H82E7) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5 µg/well) plate can bind Human IL-1 RI Protein, Fc Tag (Cat. No. ILI-H5253) with a linear range of 0.6-10 ng/mL (QC tested).

Background

Interleukin-1 alpha (IL1a) is also known as IL-1A, IL1, IL1-ALPHA,IL1F1,and is a cytokine of the interleukin-1 family. IL1a possesses a wide spectrum of metabolic, physiological, haematopoietic activities, and plays one of the central roles in the regulation of the immune responses. It binds to the interleukin-1 receptor. IL-1α is constitutively produced by epithelial cells. It is found in substantial amounts in normal human epidermis and is distributed in a 1:1 ratio between living epidermal cells and stratum corneum.The constitutive production of large amounts of IL-1α precursor by healthy epidermal keratinocytes interfere with the important role of IL-1α in immune responses, assuming skin as a barrier, which prevents the entry of pathogenic microorganisms into the body. In vitro, IL-1α possesses biological effect on cells in the picomolar to femtomolar range. In vivo, Shortly after an onset of an infection into organism, IL-1α activates a set of immune system response processes.

