



## Synonym

IL1A,IL-1 ALPHA,IL1F1,IL1 $\alpha$

## Source

Human IL-1 alpha, His Tag(ILA-H5216) is expressed from human 293 cells (HEK293). It contains AA Ser 113 - Ala 271 (Accession # [P01583-1](#)).

Predicted N-terminus: Ser 113

## Molecular Characterization

IL-1 alpha(Ser 113 - Ala 271)  
P01583-1 Poly-his

This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 19.9 kDa. The protein migrates as 25-27 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

## Endotoxin

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

## Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

## Formulation

Lyophilized from 0.22  $\mu$ 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

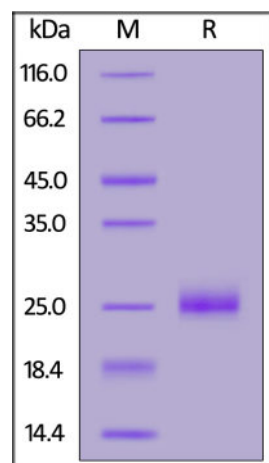
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*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.

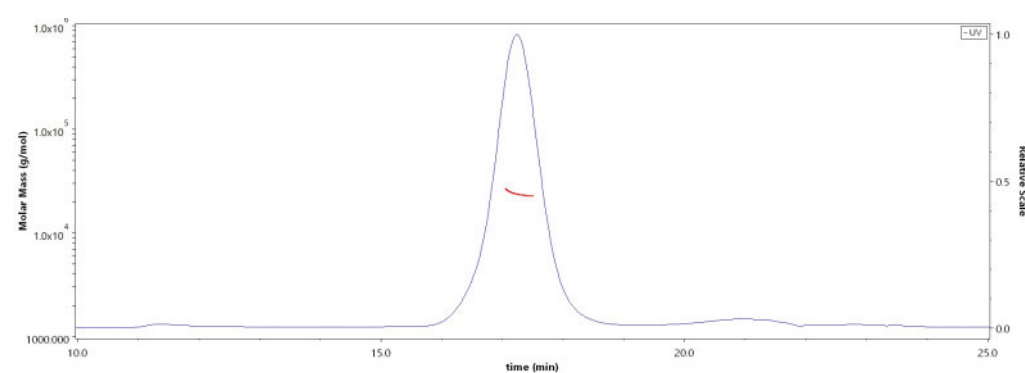
## SDS-PAGE



Human IL-1 alpha, 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%.

## Bioactivity-ELISA

## SEC-MALS

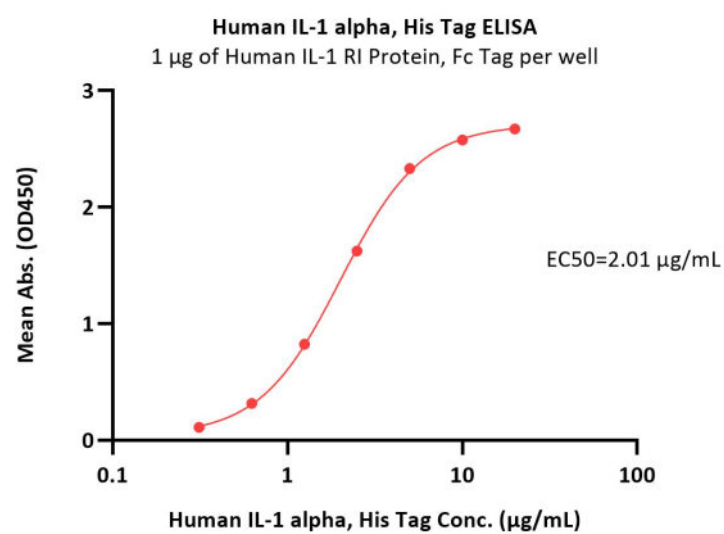


The purity of Human IL-1 alpha, His Tag (Cat. No. ILA-H5216) is more than 90% and the molecular weight of this protein is around 20-30 kDa verified by SEC-MALS.

[Report](#)

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Immobilized Human IL-1 RI Protein, Fc Tag (Cat. No. ILI-H5253) at 10 µg/mL (100 µL/well) can bind Human IL-1 alpha, His Tag (Cat. No. ILA-H5216) with a linear range of 0.3-2.5 µg/mL (QC tested).

## Background

Interleukin-1 alpha (IL1 $\alpha$ ) is also known as IL-1A, IL1, IL1-ALPHA, IL1F1, and is a cytokine of the interleukin-1 family. IL1 $\alpha$  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-1 $\alpha$  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-1 $\alpha$  precursor by healthy epidermal keratinocytes interfere with the important role of IL-1 $\alpha$  in immune responses, assuming skin as a barrier, which prevents the entry of pathogenic microorganisms into the body. In vitro, IL-1 $\alpha$  possesses biological effect on cells in the picomolar to femtomolar range. In vivo, Shortly after an onset of an infection into organism, IL-1 $\alpha$  activates a set of immune system response processes.

## Clinical and Translational Updates

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

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