

Synonym

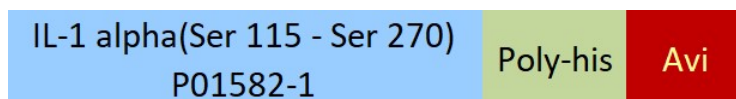
IL1A,IL-1 ALPHA,IL1F1,IL1α

Source

Biotinylated Mouse IL-1 alpha, His,Avitag (ILA-M82E8) is expressed from human 293 cells (HEK293). It contains AA Ser 115 - Ser 270 (Accession # [P01582-1](#)).

Predicted N-terminus: Ser 115

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 27-30 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Biotinylation

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

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

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH 7.4. Normally trehalose is added as protectant before lyophilization.

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

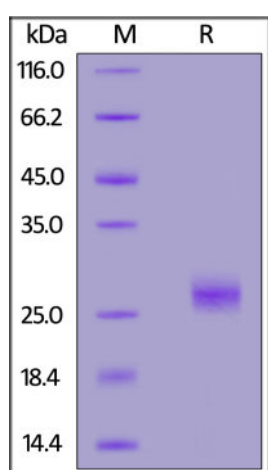
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

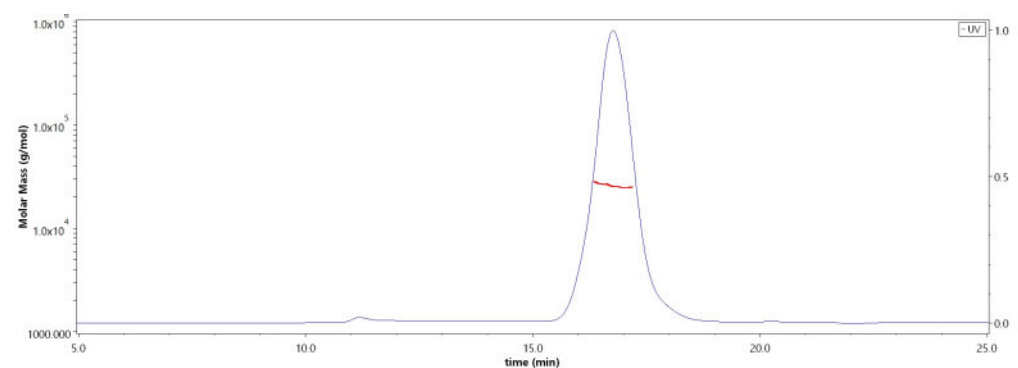
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



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

SEC-MALS



The purity of Biotinylated Mouse IL-1 alpha, His,Avitag (Cat. No. ILA-M82E8) is more than 90% and the molecular weight of this protein is around 21-31kDa verified by SEC-MALS.

[Report](#)

Background

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

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.