

#### Synonym

IL1A,IL-1 ALPHA,IL1F1,IL1α

#### Source

Mouse IL-1 alpha, His Tag (ILA-M5213) is expressed from human 293 cells (HEK293). It contains AA Ser 115 - Ser 270 (Accession # P01582-1). Predicted N-terminus: Ser 115

#### **Molecular Characterization**

IL-1 alpha(Ser 115 - Ser 270) P01582-1

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 21-27 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### 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  $0.22~\mu m$  filtered solution in PBS, pH7.4. 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

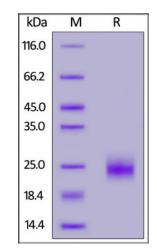
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

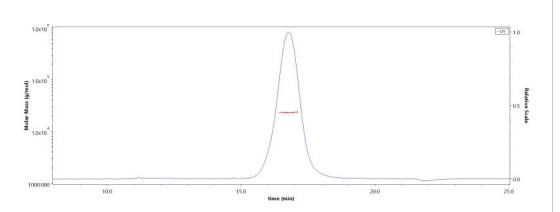
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

### **SDS-PAGE**



Mouse IL-1 alpha, His Tag 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 Mouse IL-1 alpha, His Tag (Cat. No. ILA-M5213) is more than 90% and the molecular weight of this protein is around 19-28 kDa verified by SEC-MALS.

Report

## 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

# Mouse IL-1 alpha / IL-1F1 Protein, His Tag (MALS verified)

Catalog # ILA-M5213



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 <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.