

For Research Use Only

# Recombinant Mouse IL-1 alpha protein (His Tag)(HPLC verified)



Catalog Number: Eg0263

## Basic Information

**Species:**  
Mouse

**Purity:**  
>90 %, SDS-PAGE  
>90 %, SEC-HPLC

**Tag:**  
His Tag

## Technical Specifications

**Purity:**  
>90 %, SDS-PAGE  
>90 %, SEC-HPLC

**Endotoxin Level:**  
<0.1 EU/μg protein, LAL method

**Source:**  
HEK293-derived Mouse IL-1 alpha protein Met+Ser115-Ser270 (Accession# P01582) with a His tag at the C-terminus.

**GeneID:**  
16175

**Accession:**  
P01582

**Predicted Molecular Mass:**  
21.9 kDa

**SDS-PAGE:**  
24-32 kDa, reducing (R) conditions

**Formulation:**  
Lyophilized from 0.22 μm filtered solution in PBS, pH 7.4. Normally 5% trehalose and 5% mannitol are added as protectants before lyophilization.

## Biological Activity

Not tested

## Storage and Shipping

### Storage:

It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

- Until expiry date, -20°C to -80°C as lyophilized proteins.
- 3 months, -20°C to -80°C under sterile conditions after reconstitution.

### Shipping:

The product is shipped at ambient temperature. Upon receipt, store it immediately at the recommended temperature.

## Reconstitution

Briefly centrifuge the tube before opening. Reconstitute at 0.1-0.5 mg/mL in sterile water.

## Background

Interleukin-1α (IL-1α) is a protein that plays a crucial role in the regulation of a number of key cellular processes. IL-1α is a cytokine and a potent mediator of body's response to inflammation, microbial invasion, tissue injury and immunological response. In addition, recent studies suggest that IL-1α also has a role in wound healing, rheumatoid arthritis, Alzheimer's disease and tumor growth. IL-1α functions as an alarmin during the process of sterile inflammation. It serves as a signal from dying cells to potentiate the inflammatory response, increasing the expression of other secreted factors like IL-6 and IL-8. IL-1α was found to affect the cell cycle of osteosarcoma cell to reduce cell growth.

## References

1. Dinarello CA. et al. (2009). Annu Rev Immunol. 27:519-50.
2. Dinarello CA. et al. (1998). Int Rev Immunol. 16:457-99.
3. Infante J. et al. (2007). Dement Geriatr Cogn Disord. 23:215-8.
4. Apte RN. et al. (2008). Immunol Rev. 222:222-41.
5. Palmer G. et al. (2005). Cytokine. 2:153-60.
6. Rider P. et al. (2013). Semin Immunol. 25(6):430-8.
7. Orjalo AV. et al. (2009). Proc Natl Acad Sci U S A. 106(40):17031-6.

## Synonyms

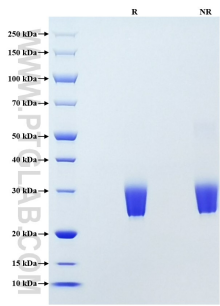
IL1a, IL1-alpha, IL 1a, IL1 alpha, IL-1, IL1

For technical support and original validation data for this product please contact

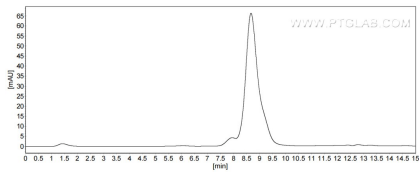
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Selected Validation Data



Purity of Mouse IL-1 alpha was determined by SDS-PAGE. The protein was resolved in an SDS-PAGE in reducing (R) and non-reducing (NR) conditions and stained using Coomassie blue.



The purity of Mouse IL-1 alpha was greater than 90% as determined by SEC-HPLC.