

## Mouse IL-1 Alpha, His Tag, E. coli

|                |  |
|----------------|--|
| Catalog Number | LDG022PME                                  |
| Package        | 5 µg / 20 µg / 100 µg / Customized package |

For full product information, images and publications, please visit [our website](#).



### Specifications

#### Species of Origin

Mouse

#### Affinity Tag

His Tag (C-term)

#### Purity

>95% as determined by SDS-PAGE analysis.

#### Activity

Measure by its ability to induce D10.G4.1 cells proliferation. The ED<sub>50</sub> for this effect is <5 pg/mL. The specific activity of recombinant mouse IL-1 alpha is > 2 x 10<sup>8</sup> IU/mg.

#### Form

Lyophilized

#### Expression System

Escherichia coli

#### Storage Buffer

Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.

#### Molecular weight

The protein has a calculated MW of 18.93 kDa. The protein migrates as 20 kDa under reducing condition (SDS-PAGE analysis).

#### Endotoxin Level

<0.1 EU per 1 µg of the protein by the LAL method.

### Background

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### Background

Interleukin-1 alpha (IL1 alpha or IL1 $\alpha$ ) is a member of the interleukin-1 cytokine family, found constitutively present in epithelial layers of the entire gastrointestinal tract, lung, liver, kidney, endothelial cells, and astrocytes. The synthesized IL-1 alpha is a 31 kDa inactive precursor and can be cleaved by intracellular caspase-1 or extracellular proteases to generate the bioactive 17 kDa form and the 16 kDa N-terminal cleavage product. Both precursor and mature IL-1 alpha protein bind to the IL-1 receptor (IL-1R), initiating a cascade of inflammatory cytokines and chemokines production such as IL-6, IL-8, and TNF, in response to viral and bacterial pathogens conditions. IL-1 alpha plays a central role in immune-surveillance mechanisms, stimulating macrophages, neutrophils, and CD8+ T cells activity.

### Uniprot ID

#P01582

### Synonyms

Interleukin-1 alpha, IL-1 alpha

### Sequence Note

Ser115-Ser270

## Instruction

### Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H<sub>2</sub>O to a concentration not less than 200  $\mu$ g/mL and incubate the stock solution for at least 20 min to ensure sufficient re-dissolved.

### Shipping

The product is shipped with polar packs. Upon receipt, store it immediately at -20°C or lower for long term storage.

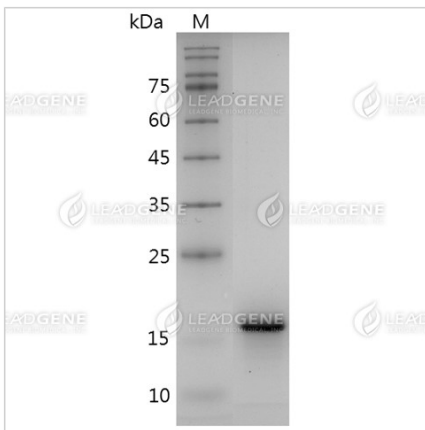
### Stability & Storage

This product is stable after storage at:

- -20°C for 12 months in lyophilized state from date of receipt.
- -20°C or -80°C for 1 month under sterile conditions after reconstitution.

Avoid repeated freeze/thaw cycles.

### Image



SDS-PAGE analysis of recombinant mouse IL-1 alpha.

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