

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 $_{50}$ for this effect is <5 pg/mL. The specific activity of recombinant mouse IL-1 alpha is > 2 x 10 8 IU/mg.

Form

Lyophilized

Expression system

Escherichia coli

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



Background

Interleukin-1 alpha (IL1 alpha or IL1 α) 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 Nterminal 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.

Synonyms

Interleukin-1 alpha, IL-1 alpha

Uniprot ID

#P01582

Sequence Note

Ser115-Ser270

Instruction

Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile H_2O to a concentration not less than 200 μ g/mL and incubate the stock solution for at least 20 min to ensure sufficient redissolved.

Shipping

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



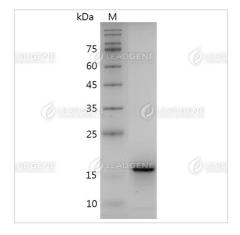
Stability & Storage

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.

Disclaimer: For Research Use or Further Manufacturing Only.