

# Mouse IL-18, His Tag, E. coli

 Catalog Number
 LDG043PME

 Package
 5 μg / 20 μg / 100 μg / Customized package

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### **Specifications**

**Species of Origin** 

Mouse

**Affinity Tag** 

His Tag (C-term)

**Purity** 

>98% as determined by SDS-PAGE analysis.

**Activity** 

Measure by its ability to induce IFN gamma secretion in KG-1 cells. The ED $_{50}$  for this effect is <0.5  $\mu g/mL$ .

Form

Lyophilized

**Expression System** 

Escherichia coli

**Storage Buffer** 

Lyophilized from a 0.2  $\mu m$  filtered solution of PBS, pH 8.0.

Molecular weight

The protein has a calculated MW of 19.1 kDa. The protein migrates as 18 kDa under reducing condition (SDS-PAGE analysis).

**Endotoxin Level** 

<0.1 EU per 1  $\mu g$  of the protein by the LAL method.

### **Background**



#### **Background**

Interleukin-18 (IL-18) belongs to the IL-1 superfamily and is constitutively produced by macrophages, dendritic cells (DCs) and other cells. IL-18 binds to the receptor of IL-18 (IL-18R) and initiate the recruitment and heterodimerization of the IL-18RAcP, leading to downstream activation of NF-kB. After stimulation with IL-18, multiple cytokines including IFN-γ, IL-13, IL-4, IL-8, and GM-CSF and both Th1 and Th2 lymphokines could be produced by different cells. As an immunoregulaory cytokine, IL-18 can promote development of T helper 1 (Th1) cells, which maximizes the production of IFN by synergistically stimulating to mature Th1 effectors in combination with IL-12. On the contrary, it inhibits the production of the antiinflammatory cytokine IL-10. In addition, IL-18 exhibits multiple proinflammatory functions, such as increases in cell adhesion molecules, nitric oxide synthesis, and chemokine production.

**Uniprot ID** 

#P70380

#### **Synonyms**

Interleukin-18, Interferon gamma-inducing factor, IFN-gamma-inducing factor, Interleukin-1 gamma , IL-1 gamma

**Sequence Note** 

Asn36-Ser192

### Instruction

#### Reconstitution

It is recommended to reconstitute the lyophilized protein in sterile  $H_2O$  to a concentration of 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.



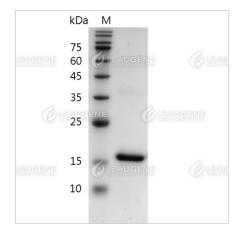
### Stability & Storage

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-18.

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