

# Recombinant Mouse IL-18 Protein

Catalog No.: RP02521 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Mouse	16173	P70380

### Tags

C-His

### Synonyms

Ilg; Il-; Igif; Il-18; IL18

## Product Information

Source	Purification
HEK293 cells	> 98% by SDS-PAGE.

### Endotoxin

<0.1EU/ $\mu$ g

### Formulation

Lyophilized from a 0.22  $\mu$ m filtered solution of PBS, pH 8.0.

### Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stabilizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize freeze-thaw cycles.

## Contact

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## Background

Interleukin-18 (IL-18) is a cytokine that belongs to the IL-1 superfamily and is produced by macrophages and other cells. IL-18 works by binding to the interleukin-18 receptor, and together with IL-12 it induces cell-mediated immunity following infection with microbial products like lipopolysaccharide (LPS). After stimulation with IL-18, natural killer (NK) cells and certain T cells release another important cytokine called interferon- $\gamma$  (IFN- $\gamma$ ) or type II interferon that plays an important role in activating the macrophages or other cells. The combination of this cytokine and IL12 has been shown to inhibit IL-4 dependent IgE and IgG1 production, and enhance IgG2a production in B cells. IL-18 binding protein (IL18BP) can specifically interact with this cytokine, and thus negatively regulate its biological activity.

## Basic Information

### Description

Recombinant Mouse IL-18 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence of Mouse IL-18 fused with His tag at the C-terminus

### Bio-Activity

Measured by its ability to induce IFN-gamma secretion by KG1 human acute myelogenous leukemia cells in the presence of TNF-alpha (Catalog: RP00001). The ED<sub>50</sub> for this effect is 42.93-171.72 ng/mL, corresponding to a specific activity of  $0.58 \times 10^4 \sim 2.3 \times 10^5$  units/mg.

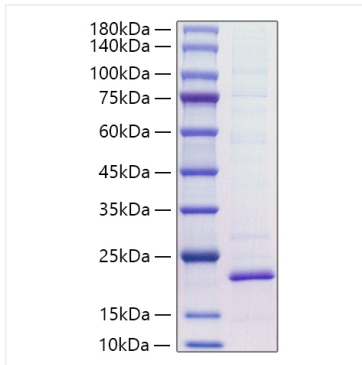
### Storage

Store the lyophilized protein at -20°C to -80°C for long term.

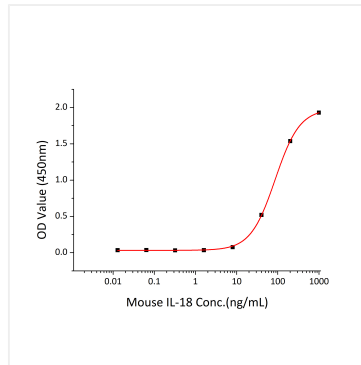
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

## Validation Data



Recombinant Mouse IL-18 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 15-25 kDa.



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