

RP02521

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Recombinant Mouse IL-18 Protein

Catalog No.: RP02521

Recombinant

1 Publications

Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	16173	P70380

Tags

C-His

Synonyms

Ig; IL-; Igif; IL-18;IL18

Background

Interleukin-18 (L-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- γ (IFN- γ) 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.

Product Information

Source

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 free-thaw cycles.

Purification

$\geq 95\%$ as determined by SDS-PAGE.

Endotoxin

< 0.1 EU/ μ g of the protein by LAL method.

Formulation

Lyophilized from a 0.22 μ m filtered solution of PBS, pH 8.0.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of

Basic Information

Description

Recombinant Mouse IL-18 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Asn36-Ser192) of Mouse IL-18 fused with His tag at the C-terminus

Bio-Activity

Measured by its ability to induce IFN-gamma secretion by KG-1 human acute myelogenous leukemia cells in the presence of TNF-alpha (Catalog: RK05052). The ED_{50} for this effect is 4.24-16.98 ng/mL, corresponding to a specific activity of $5.89 \times 10^4 \sim 2.35 \times 10^5$ units/mg.

Shipping

Lyophilized proteins are shipped at ambient temperature. Liquid proteins are shipped at frozen temperature with dry ice. Upon receipt, store it immediately at the temperature recommended below.

Operational Notes

For your safety and health, please wear a lab coat and disposable gloves for handling.

Storage

Store at -20°C
Avoid repeated freeze/thaw cycles.

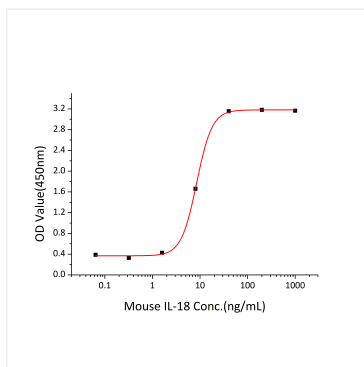
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Contact

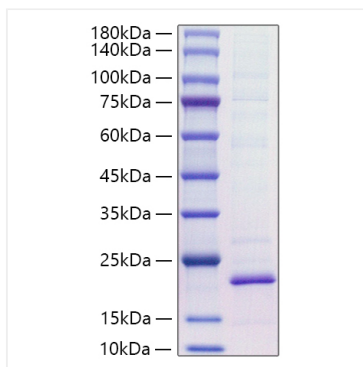


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Validation Data



Measured by its ability to induce IFN- γ secretion by KG-1 human acute myelogenous leukemia cells in the presence of TNF- α (Catalog: RK05052). The ED₅₀ for this effect is 4.24-16.98 ng/mL, corresponding to a specific activity of $5.89 \times 10^4 \sim 2.35 \times 10^5$ units/mg.



Recombinant Mouse IL-18 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.