Recombinant Mouse, IL18 / Interleukin-18, Animal Free & Carrier Free

Cat #: C-CYP145

Size: 5μg, 20μg, 100μg, 500μg, 1mg

Shipping: Blue Ice

Product Overview

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: *Escherichia Coli*.

Purity: >98% as determined by SDS-PAGE. Ni-NTA chromatography.

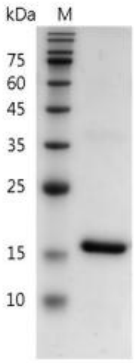
Biological Activity: Measure by its ability to induce IFN gamma secretion in KG-1 cells. The ED_{50} for this effect is < 0.5 μg/mL.

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

Amino acid sequence:

MNFGRLHCTTAVIRNINDQVLFVDKRQPVFEDMTDIDQSASEPQTRLIIYMYKDSEVRGLAVTLSVKDSKMSTLSCKNKIISFEEMDPPENI DDIQSDLIFFQKRVPGHNKMEFESSLYEGHFLACQKEDDAFKLILKKKDENGDKSVMFTLTNLHQS with polyhistidine tag at the C-terminus

Formulation: Lyophilized from a sterile filtered aqueous solution in 1×PBS, pH 8.0.



SDS-PAGE analysis of recombinant mouse IL-18

Usage Method

1. Before opening, it is recommended to centrifuge at 3000-3500 rpm for 5 minutes.

2. Reconstitute to a concentration of 0.1-1.0 mg/mL in sterile distilled H_2O. Allow the solution to sit at room temperature for at least 20 minutes to ensure complete dissolution. Avoid vigorous vortexing.

3. The reconstituted solution can be stored at 2-8°C for up to 1 week.

4. For long-term storage, it is recommended to further dilute the solution with a carrier protein (such as 0.1% BSA, 10% FBS, or 5% HSA) to a concentration of no less than 10 μg/mL and aliquot for storage at -20°C to -80°C for 3 to 6 months. If serum-free experiments are required, a 5% trehalose solution can be used as a carrier instead. Avoid repeated freeze-thaw cycles.

Storage

Physical Appearance	Storage	Stability
Lyophilized powder	-20°C to -80°C	1 year
Reconstitution (initial)	2°C to 8°C	Less than 1 week
Reconstitution (after dilution)	-20°C to -80°C	3 to 6 months

Note

The reagent is only used in the field of scientific research, not suitable for clinical diagnosis or other purposes.