

RP03526

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# Recombinant Mouse IL-11 Protein

Catalog No.: RP03526 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
HEK293 cells	16156	P47873

### Tags

C-Fc

### Synonyms

Il11 , Interleukin-11; IL-11

## Product Information

Source	Purification
	≥ 95 % as determined by SDS-PAGE.

### Endotoxin

< 1 EU/μg of the protein by LAL method.

### Formulation

Lyophilized from a 0.2 μm filtered solution of 10mM HAC-NaAc, 150mM NaCl, 0.004% Tween80, 5% Mannitol, pH 4.0.

### Reconstitution

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

## Contact



[www.abclonal.com](http://www.abclonal.com)

## Background

IL-11 (Interleukin 11) is a pleiotropic cytokine in the IL-6 family, which also includes LIF, CNTF, Oncostatin M, Cardiotrophin-1, IL-27 and IL-31. In humans, IL-11 was also independently discovered as an adipogenesis inhibitory factor (AGIF). The mouse IL-11 cDNA encodes a 199 amino acid (aa) precursor, which generates a 178 aa, 19 kDa mature unglycosylated protein. Mature mouse IL-11 shares 88%, 97%, and 89% aa sequence identity with human, rat and canine IL-11, respectively. IL-11 is secreted by osteoblasts, synoviocytes, fibroblasts, chondrocytes, intestinal myofibroblasts, and trophoblasts, among other cell types. It is found in the plasma mainly during inflammation, such as that associated with viral infection, cancer, or inflammatory arthritis, and is considered to be primarily anti-inflammatory. It stimulates hematopoiesis and thrombopoiesis, regulates macrophage differentiation, and confers mucosal protection in the intestine. It has also been found to enhance T cell polarization toward Th2, promote B cell IgG production, increase osteoclast bone absorption, protect endothelial cells from oxidative stress, and regulate epithelial proliferation and apoptosis. IL-11 synergizes with several other cytokines to produce these effects, and its effects overlap with those of IL-6. IL-11 receptor activation requires formation of a complex of two IL-11 molecules with two molecules of the ligand-binding IL-11 R alpha subunit and two molecules of the ubiquitously expressed cell signaling beta subunit, gp130. A soluble form of IL-11 R alpha can bind IL-11 and either form a signaling complex with gp130 on the cell surface, or inhibit cell surface IL-11 R alpha /gp130 signaling.

## Basic Information

### Description

Recombinant Mouse IL-11 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Pro22-Leu199) of Mouse IL-11 (Accession # P47873) fused with Fc tag at the C-terminus.

### Bio-Activity

### Shipping

The product is shipped at ambient temperature. 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. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.

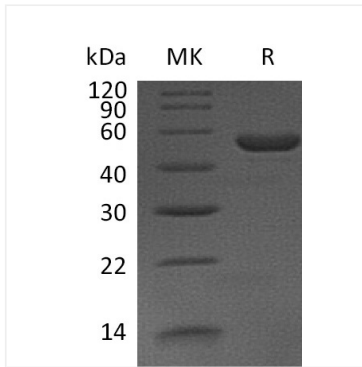
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

\* For your safety and health, please wear a lab coat and disposable gloves when handling.

## Validation Data

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Recombinant Mouse IL-11 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.