

# Recombinant Mouse IL-13 Protein

Catalog No.: RP01596 **Recombinant**

## Sequence Information

Species	Gene ID	Swiss Prot
Mouse	16163	P20109

### Tags

C-His

### Synonyms

Interleukin-13; IL-13; T-Cell Activation Protein P600; Il13;  
Il-13;IL13;Interleukin-13; IL-13; T-Cell Activation Protein P600; Il13; Il-13;IL13

## Product Information

Source	Purification
HEK293 cells	> 95% by SDS-PAGE.

### Endotoxin

<0.1EU/ $\mu$ g

### Formulation

Lyophilized from a 0.22  $\mu$ m filtered solution of PBS, pH 7.4.

### 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 free-thaw cycles.

## Contact

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## Background

Mouse interleukin 13 (mIL-13) is a pleiotropic cytokine produced by activated Th2 cells. IL-13 induces B cell proliferation and immunoglobulin production. It contains a four helical bundle with two internal disulfide bonds. Mouse IL13 shares 58% sequence identity with human protein and exhibits cross-species activity. IL13 signals via receptor IL13R (type2, IL4R) and activates STAT-6. IL13 initially binds IL-13R $\alpha$ 1 with low affinity and triggers association of IL4R  $\alpha$ , generating a high affinity heterodimeric receptor IL13R and eliciting downstream signals. IL13 also binds IL-13R $\alpha$ 2 with high affinity, which plays a role in a negative feedback system of IL13 signaling. IL13 is an important mediator of allergic inflammation and disease.

## Basic Information

### Description

Recombinant Mouse IL-13 Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (Ser26-Phe131) of mouse IL-13 (Accession #NP\_032381.1) fused with and a 6 $\times$ His tag at the C-terminus.

### Bio-Activity

Measured in a cell proliferation assay using TF-1 Mouse erythroleukemic cells. The ED<sub>50</sub> for this effect is 23.9-95.6 ng/mL, corresponding to a specific activity of 1.05 $\times$ 10<sup>4</sup>-4.18 $\times$ 10<sup>4</sup> units/mg.

### Storage

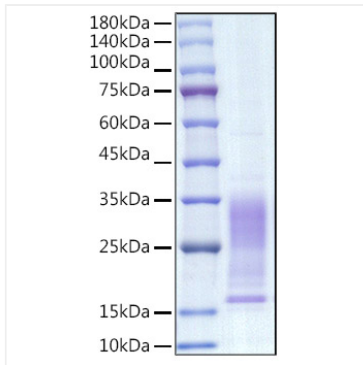
Store the lyophilized protein at -20°C to -80°C for 12 months.

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

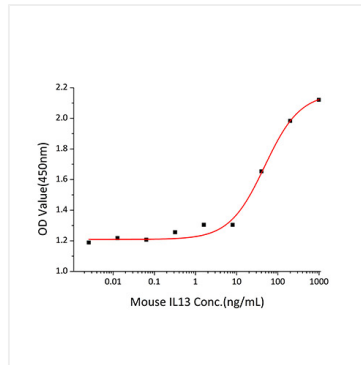
Avoid repeated freeze/thaw cycles.

## Validation Data

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Recombinant Mouse IL-13 Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 15-30 kDa.



Recombinant Mouse IL-13 stimulates cell proliferation of the TF-1 Mouse erythroleukemic cells. The ED<sub>50</sub> for this effect is 23.9-95.6 ng/mL, corresponding to a specific activity of  $1.05 \times 10^4$ - $4.18 \times 10^4$  units/mg.