# **Recombinant Mouse IL-13 Protein**

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Catalog No.: RP01596 Recombinant 2 Publications

# **Sequence Information**

**Species Gene ID Swiss Prot**Mouse 16163 P20109

Tags

C-His

### **Synonyms**

Interleukin-13; IL-13; T-Cell Activation Protein P600: II13:

II-13;IL13;Interleukin-13; IL-13; T-Cell Activation Protein P600; II13; II-13;IL13

# **Product Information**

**Source** Purification HEK293 cells ≥ 95 % as

determined by SDS-

PAGE.

Calculated MW Observed MW

12.52 kDa 15-35 kDa

#### **Endotoxin**

< 0.1 EU/ $\mu$ g of the protein by LAL method.

### **Formulation**

Lyophilized from a 0.22 µm 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 stablizer (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 immunoglobin 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 $_{50}$  for this effect is 5.4-21.4 ng/mL, corresponding to a specific activity of  $4.68 \times 10^4 \sim 1.85 \times 10^5$  units/mg.

### Shipping

The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

## Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt

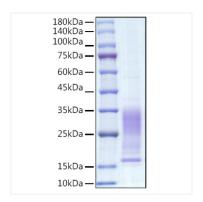
After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week.

Avoid repeated freeze/thaw cycles.

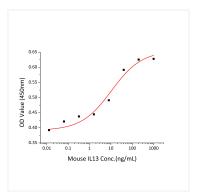
#### **Operational Notes**

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

# **Validation Data**



Recombinant Mouse IL-13 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.



Recombinant Mouse IL-13 stimulates cell proliferation of the TF-1 Mouse erythroleukemic cells. The ED $_{50}$  for this effect is 5.4-21.4 ng/mL, corresponding to a specific activity of  $4.68\times10^4\sim1.85\times10^5$  units/mg.