

## Recombinant Mouse Interleukin-13/IL-13 Protein

Catalog No. PKSM041073

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

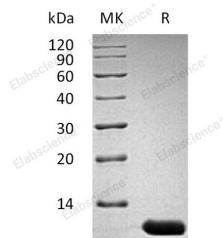
### Description

<b>Synonyms</b>	Interleukin-13;IL-13;T-Cell Activation Protein P600;IL13;IL-13
<b>Species</b>	Mouse
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Ser26-Phe131
<b>Accession</b>	P20109
<b>Calculated Molecular Weight</b>	11.7 kDa
<b>Observed molecular weight</b>	9-14 kDa
<b>Tag</b>	None
<b>Bioactivity</b>	Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 1.93 ng/ml.

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 20mM Histidine-HCl, 8% Trehalose, 4% Mannitol, 50mM NaCl, 0.05% Tween 80, pH 6.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### Background

#### For Research Use Only

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.