

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

Catalog Number: PKSM041322

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

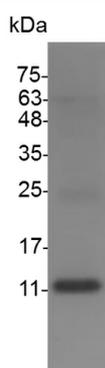
### Description

|                     |   |
|---------------------|---|
| <b>Species</b>      | Mouse   |
| <b>Source</b>       | E.coli-derived Mouse Interleukin-13/IL-13 protein Pro22-Phe131, with an C-terminal His  |
| <b>Mol_Mass</b>     | 13.1 kDa  |
| <b>Accession</b>    | P20109  |
| <b>Bio-activity</b> | Measure by its ability to induce TF-1 cells proliferation. The ED <sub>50</sub> for this effect is <4 ng/mL. The specific activity of recombinant mouse IL-13 is > 2.5 x 10 <sup>5</sup> IU/mg. |

### Properties

|                       |  |
|-----------------------|--|
| <b>Purity</b>         | > 95 % as determined by reducing SDS-PAGE.   |
| <b>Endotoxin</b>      | < 0.1 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 sterile PBS, pH 7.4.<br>Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization.<br>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

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-13Rα1 with low affinity and triggers association of IL4Rα, generating a high affinity heterodimeric receptor IL13R and eliciting downstream signals. IL13 also binds IL-13Rα2 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.

### For Research Use Only