

## Recombinant Mouse Interleukin-13/IL-13 Protein(His Tag)

Catalog Number: GPMM0037

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

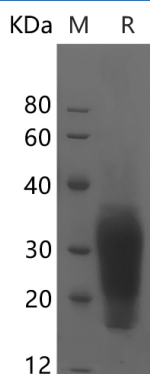
### Description

|               |                                                                                             |
|---------------|---------------------------------------------------------------------------------------------|
| Species       | Mouse                                                                                       |
| Source        | HEK293 Cells-derived Mouse Interleukin-13/IL-13 protein Met1-Phe131, with an C-terminal His |
| Calculated MW | 14.3 kDa                                                                                    |
| Observed MW   | 25 kDa                                                                                      |
| Accession     | P20109                                                                                      |
| Bio-activity  | Not validated for activity                                                                  |

### Properties

|                |                                                                                                                                                                                                                                        |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purity         | > 95% as determined by reducing SDS-PAGE.                                                                                                                                                                                              |
| Endotoxin      | < 1.0 EU/mg of the protein as determined by the LAL method                                                                                                                                                                             |
| Storage        | 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. |
| Shipping       | This product is provided as lyophilized powder which is shipped with ice packs.                                                                                                                                                        |
| Formulation    | Lyophilized from a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.                                                                                                                                                  |
| Reconstitution | It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.                                                                                               |

### 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.