



## Recombinant Protein Technical Manual

**Recombinant Mouse Interleukin3/IL3 Protein (aa 2631,His Tag)(Active)**  
RPES1606

### Product Data:

**Product SKU:** RPES1606

**Size:** 10µg

**Species:** Mouse

**Expression host:** Human Cells

**Uniprot:** P20109

### Protein Information:

**Molecular Mass:** 12.7 kDa

**AP Molecular Mass:** 15-30 kDa

**Tag:** C-6His

**Bio-activity:** Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 23 ng/ml.

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** 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 of PBS, pH 7.4.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Cell Culture

**Synonyms:** Interleukin3; IL3; T-Cell Activation Protein P600; IL13; IL3

## Immunogen Information:

**Sequence:** Ser26-Phe131

## Background:

Mouse interleukin 13 (mIL3) is a pleiotropic cytokine produced by activated Th2 cells. IL3 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 IL3R $\alpha$ 1 with low affinity and triggers association of IL4R $\alpha$ , generating a high affinity heterodimeric receptor IL13R and eliciting downstream signals. IL13 also binds IL3R $\alpha$ 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.