



Recombinant Protein Technical Manual

**Recombinant Mouse Interleukin3/IL3 Protein
(Active)**
RPES1436

Product Data:

Product SKU: RPES1436

Size: 10µg

Species: Mouse

Expression host: E. coli

Uniprot: P20109

Protein Information:

Molecular Mass: 12.2 kDa

AP Molecular Mass: 12 kDa

Tag:

Bio-activity: Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 0.1 ng/ml.

Purity: > 95% as determined by reducing SDS-PAGE.

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

Storage: Lyophilized protein should be stored at < -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°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 20mM PB, 150mM NaCl, pH 7.2.

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: Pro22-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 α 1 with low affinity and triggers association of IL4R α , generating a high affinity heterodimeric receptor IL13R and eliciting downstream signals. IL13 also binds IL3R α 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.