

Recombinant Protein Technical Manual

Recombinant Mouse Interleukin3/IL3 Protein (aa 2631)(Active) RPES1586

Product Data:

Size: 10µg

Species: Mouse

Expression host: E. coli

species: Mouse

Uniprot: P20109

Protein Information:		
Molecular Mass:	11.7 kDa	
AP Molecular Mass:	18 &25 kDa	
Tag:		
Bio-activity:	Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is 1.93 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 μ m 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	

Sequence: Ser26-Phe131

Background:

Mouse interleukin 13 (mIL3) is a pleiotropic cytokine produced by activated Th2 cells. IL3 induces B cell proliferation and immunoglobin 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 IL3Ra1 with low affinity and triggers association of IL4Ra, generating a high affinity heterodimeric receptor IL13R and eliciting downstream signals. IL13 also binds IL3Ra2 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.