

Datasheet Cat. No. P1162

APENER BIC **Recombinant Mouse IL-3** 

## Information

Gene ID	16187	
Accession #	P01586	
Alternate Names	Hematopoietic growth factor, MCGF, Multipotential colony-stimulating factor, P-cell-stimulating factor.	
Source	Escherichia coli.	
M.Wt	Approximately 14.8 kDa globular protein containing 134 amino acid residues.	
AA Sequence	DTHRLTRTLN CSSIVKEIIG KLPEPELKTD DEGPSLRNKS FRRVNLSKFV ESQGEVDPED RYVIKSNLQK LNCCLPTSAN DSALPGVFIR DLDDFRKKLR FYMVHLNDLE TVLTSRPPQP ASGSVSPNRG TVEC	
Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. - 12 months from date of receipt, -20 to -70 °C as supplied. - 1 month, 2 to 8 °C under sterile conditions after reconstitution. - 3 months, -20 to -70 °C under sterile conditions after reconstitution.	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4.	
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.	
Biological Activity	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by the dose-dependent stimulation of the proliferation of murine M-NFS-60 cells is less than 0.05 ng/ml, corresponding to a specific activity of > 2 × $10^7$ IU/mg.	
Shipping Condition	Gel pack.	
Handling	Centrifuge the vial prior to opening.	
Usage	For Research Use Only! Not to be used in humans.	

## Components and Storage

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Components	10 µg	100 µg	500 µg	
Recombinant Mouse IL-3	10 µg	100 µg	500 µg	

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- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

Quality Control	<b>O</b>	<b>3191111111111111</b>
Purity	> 98 % by SDS-PAGE and HPLC analyses.	PER Town
Endotoxin	_ess than 1 EU/μg of rMulL-3 as determined by LAL method.	

## Description

Interleukin-3 (IL-3) is a type of biological signal (cytokine) which is encoded by the IL-3 gene located on chromosome 5 and produced primarily by activated T cells beside human thymic epithelial cells, activated murine mast cells, murine keratinocytes and neurons/astrocytes. The protein acts in hematopoiesis by controlling the production, differentiation, and function of 2 related white cell populations of the blood, the granulocytes and the monocytes-macrophages. In addition, it exerts its biological activities through binding to interleukin-3 receptors included  $\alpha$  and  $\beta$  subunits. The Mouse IL-3 is different from human IL-3 and contains 140 amino acids residues. Specifically, mouse and human IL-3 share low homology and have not cross species activity.

## Reference

- 1. Yang YC, Ciarletta AB, Temple PA, et al. 1986. Cell. 47:3-10.
- 2. Otsuka T, Miyajima A, Brown N, et al. 1988. J Immunol. 140:2288-95.
- 3. Miyatake S, Yokota T, Lee F, et al. 1985. Proc Natl Acad Sci U S A. 82:316-20.
- 4. Dorssers L, Burger H, Bot F, et al. 1987. Gene. 55:115-24.

