

BACKGROUND

Interleukin-3 (IL-3) is a cytokine produced by activated T-cells and mast cells. IL-3 is able to induce the differentiation of hematopoietic stem cells to precursor cells of myeloid lineage (erythrocytes, megakaryocytes, granulocytes, dendritic cells and monocytes). IL-3 also has functions in the nervous system and appears to be important in several chronic inflammatory diseases.

Recombinant mouse IL-3 is a non-glycosylated protein, containing 135 amino acids and having a molecular weight of 15.1 kDa.

Alternative Names:

MCGF, Multi-CSF, HCGF, P-cell stimulation factor

Amino Acid Sequence:

MDTHRLTRL NCSIVKEII GKLPEPELKT DDEGPSLRNK
SFRRVNLSKF VESQGEVDPE DRYVIKSNLQ KLNCLPTSA
NDSALPGVFI RDLDDFRKKL RFYMVHLNDL ETVLTSRPPQ
PASGSVSPNR GTVEC

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant mouse IL-3 is lyophilized with no additives.

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is determined by the dose-dependent stimulation of mouse M-NFS-60 cells and is typically less than 0.05 ng/mL.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

