

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 human IL-3 is a non-glycosylated protein, containing 133 amino acids and having a molecular mass of 15 kDa.

Alternative Names:

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

Amino Acid Sequence:

APMTQTSLK TSWVNCNMI DEITHLKQP PLPLDFNNL
NGEDQDILME NNLRRPNLEA FNRAVKSLQN ASAIESILKN
LLPCLPLATA APTRHPIHIK DGDWNEFRRK LTFYKLTLEN
AQAQTTLSL AIF

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human 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 20 mM Acetic acid at a concentration of 0.1 – 0.5 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 TF-1 cells and is typically less than 0.1 ng/ml.

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

