



PRODUCT DATA SHEET

Product: IL-3 (recombinant human)

Cat. No.: BC-275 (10 µg)

Synonyms:

Interleukin-3 precursor, Multipotential colony-stimulating factor, Hematopoietic growth factor, P-cell-stimulating factor, Mast-cell growth factor, MCGF

Background:

Interleukin-3 (IL-3) is a cytokine produced by activated T-cells and mast cells that is active on a broad range of hematopoietic cells and in the nervous system and appears to be important in several chronic inflammatory diseases.

Description:

Recombinant Human IL-3 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 133 amino acids and having a molecular mass of 15,000 Dalton. Recombinant human IL-3 is purified by proprietary chromatographic techniques.

Amino Acid Sequence:

The sequence of the first five N-terminal amino acids was determined to be Ala-Pro-Met-Thr-Gln.

Origin:

Produced in *E. Coli*.

Format:

Sterile filtered white powder. Lyophilized from 1 mg/mL solution in water containing 5 mg HSA and 4.3 mg NaCl.

Purity:

Greater than 98.0% as determined by RP-HPLC, anion-exchange FPLC, reducing and non-reducing SDS-PAGE Silver Stained gel. Dimers and aggregates: less than 1% as determined by silver-stained SDS-PAGE.

Endotoxin:

Less than 0.1 ng/µg (IEU/µg) of recombinant human IL-3.

Reconstitution:

Reconstitute in sterile 18MΩ-cm H₂O at not less than 100 µg/mL, which can then be further diluted to other aqueous solutions.

Biological Activity:

Recombinant human IL-3 is fully biologically active when compared to standard. The ED50 as determined by the dose-dependant stimulation of TF-1 cells is less than 0.1 ng/mL, corresponding to a Specific Activity of 1 x 10⁷ IU/mg.

Storage:

Lyophilized recombinant human IL-3, although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution recombinant human IL-3 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Limitations:

For *in vitro* research use only. Not for use in diagnostics or in humans.

Warranty:

No warranties, expressed or implied, are made regarding the use of this product. KAMIYA BIOMEDICAL COMPANY is not liable for any damage, personal injury, or economic loss caused by this product.