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Product Information

Interleukin-3 (IL-3)

Mouse, Recombinant
Expressed in *E. coli*

Product No. **I 4144**

Product Description

Interleukin-3 (IL-3) is a multifunctional protein originally called colony forming unit-stimulating activity (CFU-SA) produced by activated T lymphocytes.^{1, 2} IL-3 appears to support the formation of multilineage colonies in the early development of multipotent hematopoietic progenitor cells. IL-3 has been shown to induce colony formation of macrophages, neutrophils, mast cells, and megakaryocytes from agar-suspended bone marrow cells.³ Interleukin-3 interacts with IL-2 to simulate growth of T lymphocytes⁴ and to induce IgG secretion from activated B cells.⁵ Other synonyms or activities attributed to IL-3 include multicolony stimulating factor, mast cell growth factor, burst promoting activity, histamine-producing cell stimulating factor, and WEHI-II-3 factor.⁶ IL-3 is a species-specific, variably glycosylated cytokine. Recombinant mouse IL-3, a 15.1 kDa globular protein, contains 135 amino acid residues.

Reagent

Lyophilized with 0.5 mg bovine serum albumin. Sterile filtered through a 0.2 µm filter.

Storage/Stability

The lyophilized protein is best stored at -20 °C, but is stable for up to a few weeks at room temperature. Reconstituted IL-3 should be stored in working aliquots at -20 °C. Repeated freezing and thawing is not recommended.

Preparation Instructions

Reconstitute the contents of the vial using water to a concentration of 0.1-1.0 mg/ml. This solution can then be diluted into other aqueous buffers and stored at 2-8 °C for up to 1 week. For extended storage, freeze in working aliquots at -20 °C.

Product Profile

The biological activity is measured by the dose-dependent stimulation of the proliferation of mouse M-NFS-60 cells.⁷ The EC₅₀ is defined as the effective concentration of growth factor that elicits a 50% increase in cell growth in a cell based bioassay.

References

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