

**Interleukin-2 (IL-2)
Human, Natural**Product No. **I6013****Description**

Interleukin-2 (IL-2, also known as T-cell growth factor) is an immunomodulatory factor produced by certain subsets of T-lymphocytes.¹ This lymphokine has proven useful in promoting long term growth of activated T-cells and related cell types. Interleukin-2 also has been shown to effect the activation and proliferation of NK cells, induce γ -interferon and B-cell growth factor secretion,^{2,3,4,5} and modulate the expression of the IL-2 receptor.⁶

Interleukin-2 has been isolated from a number of cell types^{7,8,9} and has also been produced by recombinant DNA technology.¹⁰ Human, Natural IL-2 (15-17 kD glycoprotein) is secreted by a human leukemia T-cell line, after simulation with T-cell mitogens.^{11,12}

Reagent

Interleukin-2 is supplied as a frozen solution containing 0.1% bovine serum albumin in 1 ml of phosphate buffered saline containing 500 or 2,000 units of IL-2.

The contents of the vial can be diluted further using a buffered solution or tissue culture medium containing 0.1-1% BSA or 1-10% serum. If aseptic technique is used, additional filtration should not be necessary and should be avoided due to the possible adsorption to the filter membrane.

Storage

Vial should be stored at -70°C. Prolonged storage of product or repeated freezing and thawing is **not** recommended and will result in decreased biological activity. After the initial thaw of the vial contents, store working aliquots at -70°C.

Performance Characteristics

Human Interleukin-2 has been tested in culture using a variation of the biological assay of Gillis, *et al.*¹³ IL-2 dependent cells are plated at low density in medium

containing various dilutions of IL-2.

After a specific incubation period, the cultures are pulsed with thymidine (³H), incubated further and then counted. One unit of biological activity is defined as the amount of the IL-2 required to induce half-maximal incorporation of thymidine.

IL-2 can be used at an approximate concentration of 20U/ml of medium for the culture of murine T-cells and approximately 100-200U/ml in LAK/NK cell activation or in proliferation studies.

This product has been tested in culture to ensure the absence of bacteria, yeast, molds any mycoplasma.

References

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Potential Biohazard

Handle as if capable of transmitting infectious agents. Refer to material safety data sheet.

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