



Product Information

Interleukin-2 (IL-2)

Human, Recombinant
Expressed in *E. coli*

Product Number **I 2644**

Product Description

Recombinant Human Interleukin-2 is a 15.5 kDa protein containing 134 amino acid residues including one intrachain disulfide bond.

Interleukin-2 (IL-2), also known as T Cell Growth Factor (TCGF) and aldesleukin, is an immunomodulatory lymphokine produced by T cells in response to antigenic or mitogenic stimulation.¹ IL-2/IL-2 receptor signaling is required for T cell proliferation and other functions, which are essential for immune response. Interleukin-2 promotes growth and differentiation of B cells, NK cells, lymphokine-activated killer (LAK) cells, monocytes, macrophages, and oligodendrocytes. It has been shown to effect the activation and proliferation of NK cells, induce γ -interferon and B cell growth factor secretion,^{2,3} and modulate the expression of the IL-2 receptor (IL-2R).⁴ Interleukin-2 has been isolated from a number of cell types^{5,6} and has been reproduced by recombinant DNA technology.⁷

Reagent

Recombinant Human Interleukin-2 is supplied as lyophilized with no additives. It is sterile filtered through a 0.2 μ m filter.

Storage/Stability

Prior to reconstitution, store the lyophilized protein at -20°C . It is stable for up to a few weeks at room temperature, but is best stored at -20°C . For extended storage, after reconstitution, store in working aliquots at -20°C . Repeated freezing and thawing is not recommended.

Preparation Instructions

Reconstitute the contents of the vial using 100 mM acetic acid to a concentration of 0.1-1.0 mg/ml. This solution can then be diluted into other aqueous buffers and stored at $2-8^{\circ}\text{C}$ for up to 1 week. For extended storage, freeze in working aliquots. It may be advisable to centrifuge the vial prior to reconstitution.

Product Profile

The biological activity of Recombinant Human Interleukin-2 is measured by the dose-dependent stimulation of the proliferation of the IL-2 dependent mouse cytotoxic T-cell line, CTLL-2.⁸ The EC_{50} 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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