



Product Information

Interleukin-2

Human, Recombinant
Expressed in *Pichia pastoris*

Product Number **T 3267**

Product Description

Interleukin-2, Human, Recombinant, is provided as a DNA sequence encoding the mature human IL-2 protein sequence with 125 cysteine amino acid mutated to Ala amino acid and expressed in the yeast, *Pichia pastoris*. This mature human IL-2 contains 133 amino acid residues and has a predicted molecular mass of approximately 15 kDa.

Interleukin-2 (IL-2), also known as T Cell Growth Factor (TCGF), is an immunomodulatory factor produced by certain subsets of T lymphocytes.¹ This lymphokine promotes long term growth of activated T cells and related cell types. Interleukin-2 plays a role in the activation and proliferation of NK cells, induces γ -interferon and B cell growth factor secretion,²⁻⁵ and modulates the expression of the IL-2 receptor.⁶ Interleukin-2 has been isolated from various cell types⁷⁻⁹ and produced by recombinant DNA technology.¹⁰

Reagent

Interleukin-2, Human, Recombinant is supplied lyophilized from a 0.2 μ m filtered solution in 50 mM sodium phosphate buffer, pH 7.0, containing 0.1% human serum albumin per 0.1 ml of cytokine.

Storage/Stability

Store at -20°C . Lyophilized samples are stable for up to 24 months at -20°C or below. After reconstitution, store working aliquots at -20°C . Repeated freezing and thawing is not recommended and will result in decreased biological activity.

Preparation Instructions

Reconstitute the contents of the vial in 50 mM phosphate buffer, pH 7.0, containing 0.1% bovine serum albumin or human serum albumin (0.1 ml). Upon

reconstitution, the cytokine can be stored at $2-8^{\circ}\text{C}$ for up to one month without detectable loss of activity. For prolonged use, aliquot and store at -20°C .

Product Profile

The biological activity of recombinant human interleukin-2 is determined in a proliferation assay using an IL-2 dependent murine cytotoxic T cell line, CTLL-2.

The ED₅₀ is defined as the effective concentration of growth factor that elicits a 50% increase in cell growth in a cell based bioassay.

Purity: $\geq 98\%$ by SDS-PAGE and HPLC.

Endotoxin: < 10 EU (endotoxin units)/0.3 mg of cytokine by the LAL method.

References

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KAA 03/04

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