Product Information

Interleukin-2 Human

Recombinant, Expressed in *Pichia pastoris*, Suitable for Cell culture.

I7908

Description

Interleukin-2 Human, Recombinant, is provided as a DNA sequence encoding the mature human IL-2 protein sequence with cysteine 125 mutated to alanine and expressed in the yeast, *Pichia pastoris*. This mature human IL-2 contains 133 amino acid residues and has a predicted molecular mass of ~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 types[7-9] and produced by recombinant DNA technology.[10]

Reagent

Supplied as a lyophilized powder from a 0.2 µm filtered solution in 10 mM Phosphate Buffer, pH 7.0, containing

0.3% Human Serum Albumin.

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at –20 °C. 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 °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.[11]

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

Purity: ≥98% (SDS-PAGE and HPLC).

Endotoxin: <10 EU (endotoxin units)/µg of cytokine (LAL method).

References

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I7908pis Rev 11/24