Product Information

Interleukin-2 human (IL-2) recombinant, expressed in HEK 293 cells cell culture tested, endotoxin tested

Product Number H7041
Storage Temperature –20 °C

Synonyms: IL-2, T Cell Growth Factor (TCGF), aldesleukin

Product Description
Recombinant human Interleukin-2 (IL-2) is expressed in human HEK 293 cells with a calculated molecular mass of 15 kDa. This protein is manufactured in human cells, with no serum. The human cells expression system allows human-like glycosylation and folding, and often supports higher specific activity of the protein. The protein is produced with no artificial tags.

IL-2 is a lymphokine that promotes the long-term proliferation of activated T cells,¹ and as such it is an essential mediator of immune response.² IL-2 signals through the IL-2 receptor, a complex consisting of three chains, termed alpha, beta, and gamma. The gamma chain is shared by all members of this family of cytokine receptors.³ Enhancement of IL-2 signaling using IL-2/anti-IL-2 immune complexes substantially improves immune surveillance in the context of suppressed immunity, and enhances control of the infection.⁴

This product is lyophilized from a solution of phosphate buffered saline (PBS), pH 7.4, with no carrier proteins. It is aseptically filled.

The biological activity of recombinant human IL-2 was tested in culture by measuring its ability to stimulate proliferation of the mouse CTLL-2 cells (mouse cytotoxic T cell line).

EC₅₀: ≤5.0 ng/mL

The EC₅₀ is defined as the effective concentration of IL-2 that elicits a 50% increase in cell growth in a cell-based bioassay.

Purity: ≥95.0% (SDS-PAGE)

Endotoxin: ≤1.00 EU/µg IL-2 (LAL)

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.

Preparation Instructions
Briefly centrifuge the vial before opening. Reconstitute in water to a concentration of 0.1 mg/mL. Do not vortex. This solution can be stored at 2–8 °C for up to 1 week. For extended storage, it is recommended to store in working aliquots at –20 °C.

Storage/Stability
Store the lyophilized product at –20 °C. The product is stable for at least 2 years as supplied.

References