Interleukin-2 human recombinant, expressed in *Pichia pastoris*

Catalog Number I7908

**Product 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. 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, and modulates the expression of the IL-2 receptor. Interleukin-2 has been isolated from various cell types and produced by recombinant DNA technology.

**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. 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 °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: ≥98% (SDS-PAGE and HPLC)

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

**References**