

## Product Information

### 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.<sup>1</sup> 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  $\gamma$ -interferon and B cell growth factor secretion,<sup>2-5</sup> and modulates the expression of the IL-2 receptor.<sup>6</sup> Interleukin-2 has been isolated from various cell types<sup>7-9</sup> and produced by recombinant DNA technology.<sup>10</sup>

### Reagent

Supplied as a lyophilized powder from a 0.2  $\mu$ m 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.<sup>11</sup>

The ED<sub>50</sub> 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% (SDS-PAGE and HPLC)

Endotoxin: <10 EU (endotoxin units)/ $\mu$ g of cytokine (LAL method)

### References

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