

BACKGROUND

Interleukin-2 (IL-2) is an immuno-modulatory cytokine produced by stimulated T-cells. IL-2 signals through the IL-2R receptor to induce proliferation of activated T cells. IL-2 also stimulates proliferation and differentiation of B cells, natural killer cells, monocytes and macrophages.

Recombinant human IL-2 is a non-glycosylated protein, containing 134 amino acids and having a molecular mass of 15.5 kDa. Recombinant human IL-2 has a Ser substitute for Cysteine at position 126.

Alternative Names:

T cell growth factor, TCGF, Aldesleukin

Amino Acid Sequence:

MAPTSSSTKK TQLQLEHLL DLQMILNGIN NYKNPKLTRM
LTFKFYMPKK ATELKHLQCL EEELKPLEEV LNLAQSKNFH
LRPRDLISNI NVIVLELKG ETTFMCEYAD ETATIVEFLN
RWITFSQSII STLT

TECHNICAL INFORMATION

Source: *E.coli*

Physical Appearance:

Sterile Filtered white lyophilized (freeze-dried) powder.

Formulation:

Recombinant human IL-2 is lyophilized at 1 mg/ml in 10 mM NaCitrate, pH 3.0.

Stability:

Lyophilized product is very stable at -20°C. Reconstituted material should be aliquoted and frozen at -20°C. It is recommended that a carrier protein (0.1% HSA or BSA) is added for long term storage.

Reconstitution:

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile 10 mM HCl, at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.

Protein Content and Purity determined by:

- UV spectroscopy at 280 nm
- RP-HPLC calibrated against a known standard
- Quantitation against a known standard via reducing and non-reducing SDS-PAGE gels.

Endotoxin Level:

Endotoxin level, as measured by LAL analysis, is <0.01ng/ug or <0.1EU/ug.

Biological Activity:

The activity is measured by the dose-dependent proliferation of CTLL-2 cells and is typically less than 1 ng/ml.

Products are for research use only. They are not intended for human, animal, or diagnostic applications.

