

IL-2, Human

Cat. No.: Z00368-50

Size: 50.0 ug

Synonyms: rHuIL-2; rHuIL2; Interleukin-2; Interleukin2

Description:

In vitro studies performed on human cell lines demonstrate the immunoregulatory properties of Interleukin-2 (IL-2) including: 1) enhancement of lymphocyte mitogenesis and stimulation of long-term growth of human Interleukin-2 (IL-2) dependent edll lines; 2) enhancement of lymphocyte cytotoxicity; 3) induction of killer cell (lymphokine-activated (LAK) and natural (NK)) activity; 4) induction of interferon-gamma production. Recombinant human Interleukin-2 (IL-2) is a highly purified protein with a molecular weight of approximately 15,300 Da. The chemical name is des-alanyl-1, serine-125 human interleukin-2. It is produced by recombinant DNA technology using a genetically engineered *E. coli* strain containing an analog of the human Human Interleukin-2 (IL-2) gene.

Amino Acid Sequence:

Ala²¹-Thr¹⁵³ (Accession #: P60568), With a N-terminal Met

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00001 MAPTSSSTKK TQLQLEHLLL DLQMILNGIN NYKNPKLTRM
00041 LTFKPYMPKK ATELKHLQCL EEELKPLEEV LNLAQSKNFH
00081 LRPRDLISNI NVIVLELKGS ETTFMCEYAD ETATIVEFLN
00121 RWITFCQSII STLT
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Source: *E. coli*

Species: Human

Biological Activity: The ED₅₀ as determined by the dose-dependant stimulation of the proliferation of CTLL-2 was found to be < 0.1 ng/ml, corresponding to a specific activity of > 1x10⁷ IU/mg.

Molecular Weight: 15,300 Da

Sequence Analysis: The sequence of the first five N-terminal amino acids has been found to be Met-Ala-Pro-Thr-Ser-Ser.

Formulation: The protein was lyophilized after extensive dialysis against 50mM Phosphate buffer, pH7.5, 5% Mannitol buffer.

Reconstitution: It is recommended to reconstitute the lyophilized recombinant human Interleukin-2 (IL-2) in sterile 18 MΩ-cm H₂O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Purity: Greater than 95% as determined by the following methods:

- (a) SEC-HPLC analysis
- (b) Reducing and non-reducing SDS-PAGE silver-stained gel analysis

Endotoxin Level: Less than 0.1 ng/µg (1 EU/µg) of recombinant human Interleukin-2 (IL-2) as determined by LAL test.

Storage: Lyophilized recombinant human Interleukin-2 (IL-2) remains stable at room temperature for three weeks, but it is best stored desiccated below -18°C. Upon reconstitution recombinant human Interleukin-2 (IL-2) should be stored at 4°C for up to seven days. For long term storage it is recommended that a carrier protein (0.1% HSA or BSA) be added. Avoid repeated freeze-thaw cycles.