

## IL-6, Human

**Cat. No.:** Z00372-1

**Size:** 1.0 mg

**Synonyms:** rHuIL-6; rHuIL6; Interleukin-6; Interleukin6

### Description:

Interleukin-6 (IL-6) is a multifunctional protein originally discovered in the media of cells stimulated with double stranded RNA. Interleukin-6 (IL-6) induces multiple effects, as indicated by its numerous synonyms: plasmacytoma growth factor, interferon- $\beta$ -2, monocyte derived human B cell growth factor, B cell stimulating factor, hepatocyte stimulating factor, Interleukin Hybridoma/Plasmacytoma-1.

Recombinant human Interleukin-6 (IL-6) that is produced in *E. coli* and purified by proprietary chromatographic techniques is a single, non-glycosylated polypeptide chain containing 185 amino acids and having a molecular mass of 21,000 Da.

### Amino Acid Sequence:

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00001 PVPPGEDSKD VAAPHRQPLT SSERIDKQIR YILDGISALR
00041 KETCNKSNMC ESSKEALAEN NLNLPKMAEK DGCFFQSGFNE
00081 ETCLVKIITG LLEFEVYLEY LQNRFESEEE QARAVQMSTK
00121 VLIQFLQKKA KNLDAITTPD PTTNASLLTK LQAQNQLQD
00161 MTHLILRSF KEFLQSSLRA LRQM
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**Source:** *E. coli*

**Species:** Human

**Biological Activity:** The ED50 as determined by the dose-dependant stimulation of murine 7TD1 cells is < 0.1 ng/ml, corresponding to a Specific Activity of  $5 \times 10^7$  IU/mg.

**Molecular Weight:** 21,000 Da

**Sequence Analysis:** The sequence of the first five N-terminal amino acids was determined and was found to be Ser-Pro-Val-Pro-Pro.

**Formulation:** The protein was lyophilized after extensive dialysis against 20mM HAc-NaAc, pH5.0, 150mM NaAc buffer.

**Reconstitution:** It is recommended to reconstitute the lyophilized recombinant human Interleukin-6 (IL-6) in sterile 18 M $\Omega$ -cm H<sub>2</sub>O not less than 100  $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

**Purity:** Greater than 98.0% as determined by:

(a) Analysis by RP-HPLC

(b) Anion-exchange FPLC

(c) Analysis by reducing and non-reducing SDS-PAGE Silver Stained gel

**Endotoxin Level:** Less than 0.1ng/ $\mu$ g (1 EU/ $\mu$ g) determined by LAL test.

**Storage:** Lyophilized recombinant human Interleukin-6 (IL-6) remains stable at room temperature for three weeks, but it is best stored desiccated below -18°C. Upon reconstitution recombinant human Interleukin-6 (IL-6) 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.