

DATASHEET
Version 20181206**IL-6, Rat****Cat. No.:** Z02785-10**Size:** 10.0 ug**Synonyms:** Interleukin-6 (IL-6), Rat;**Description:**

Interleukin-6 (IL-6) is a pleiotropic cytokine that plays an important role in host defense by regulating immune and inflammatory responses. Produced by T cells, monocytes, fibroblasts, endothelial cells and keratinocytes, Interleukin-6 (IL-6) has diverse biological functions. It stimulates B-cell differentiation and antibody production, synergizes with IL-3 in megakaryocyte development and platelet production, induces expression of hepatic acute-phase proteins, and regulates bone metabolism. Interleukin-6 (IL-6) signals through the IL-6 receptor system that consists of two chains, IL-6R alpha and gp130.

Amino Acid Sequence:

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00001 FPTSQVRRGD FTEDTTHNRP VYTTSQVGGL ITYVLREILE
00041 MRKELCNGNS DCMNSDDALS ENNLKLPEIQ RNDGCFQTGY
00081 NQEICLLKIC SGLLEFRFYL EFKNNLQDN KKDKARVIQS
00121 NTETLVHIFK QEIKDSYKIV LPTPTSALL MEKLESQKEW
00161 LRTKTIQLIL KALEEFLKVT MRSTRQT
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Source: *E. coli***Species:** Rat

Biological Activity: Fully biologically active when compared to standard. The ED₅₀ as determined by a cell proliferation assay using IL-6-dependent murine 7TD1 cells is less than 0.01 ng/ml, corresponding to a specific activity of $> 1.0 \times 10^8$ IU/mg.

Molecular Weight: Approximately 21.7 kDa, a single, non-glycosylated polypeptide chain containing 187 amino acids

Formulation: Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

Appearance: Sterile Filtered White lyophilized (freeze-dried) powder.

Reconstitution: We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in 10mM HCl to a concentration of 0.1 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Purity: > 95 % by SDS-PAGE and HPLC analyses.

Endotoxin Level: Less than 1 EU/µg of rRtIL-6 as determined by LAL method.

Storage: This lyophilized preparation is stable at 2-8 °C, but should be kept at -20 °C for long term storage, preferably desiccated. Upon reconstitution, the preparation is stable for up to one week at 2-8 °C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20 °C to -70 °C. Avoid repeated freeze/thaw cycles.