

DATASHEET
Version 20181206**IL-6, Human****Cat. No.:** Z03034-1**Size:** 1.0 mg**Synonyms:** 26 kDa protein, IFN- β 2, B cell differentiation factor (BCDF), BSF-2, HPGF, HSF, MGI-2**Description:**

Interleukin-6 (IL-6, also known as IFN- β 2) is a pleiotropic cytokine that plays important roles in acute phase reactions, inflammation, hematopoiesis, bone metabolism, and cancer progression. IL-6 is secreted by T cells and macrophages to stimulate immune response. IL-6 is responsible for stimulating acute phase protein synthesis, as well as the production of neutrophils in the bone marrow. It supports the growth of B cells and is antagonistic to regulatory T cells.

Recombinant human Interleukin-6 (rhIL-6) produced in *E. coli* is a single non-glycosylated polypeptide chain containing 185 amino acids. A fully biologically active molecule, rhIL-6 has a molecular mass of 20.9 kDa analyzed by reducing SDS-PAGE and is obtained by proprietary chromatographic techniques at GenScript.

Amino Acid Sequence:

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00001 MPVPPGEDSK DVAAPHRQPL TSSERIDKQI RYILDGISAL
00041 RKETCNKSNM CESSKEALAE NNLNLPKMAE KDGCFSQGFN
00081 EETCLVKIIT GLLEFEVYLE YLQNRFSSE EQARAVQMST
00121 KVLIQFLQKK AKNLDAITTP DPTTNASLLT KLQAQNLWLQ
00161 DMTTHLILRS FKEFLQSSLR ALRQM
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Source: *E. coli***Species:** Human**Biological Activity:** ED₅₀ <0.1ng/ml, measured by the dose-dependent stimulation of the proliferation of IL-6 dependent murine 7TD1 cells, corresponding to a specific activity of > 1 x 10⁷ units/mg.**Molecular Weight:** 20.9 kDa, observed by reducing SDS-PAGE.**Formulation:** Lyophilized after extensive dialysis against 1xPBS.**Reconstitution:** Reconstituted in ddH₂O at 100 µg/ml.**Purity:** > 95% by SDS-PAGE analysis.**Endotoxin Level:** < 0.2 EU/µg, determined by LAL method.**Storage:** Lyophilized recombinant human Interleukin-6 (rhIL-6) remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhIL-6 should be stable up to 2 weeks at 4°C or up to 3 months at -20°C.