



Recombinant Human Interleukin 6 **rHuIL-6**

Catalog number: HZ-6514

Lot: CHI-121407

Specifications and Use

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| Source | ● <i>Escherichia coli.</i> |
| Molecular Mass | ● 20.8kDa |
| Purity | ● Greater than 95% by SDS-PAGE analyses. |
| Biological Activity | ● The ED50 as determined by the dose-dependent stimulation of the proliferation of IL-6 dependent murine 7TD1 cells is < 0.1ng/ml, corresponding to a specific activity of > 1 x 10 ⁷ units/mg. |
| Endotoxin Level | ● Less than 1EU/μg. |
| Formulation | ● Sterile filtered lyophilized (freeze-dried) powder |
| Solubility | ● It is recommended to reconstitute the lyophilized rHuIL-6 in sterile ddH ₂ O containing at least 0.1% human serum albumin or bovine serum albumin to prepare a stock solution of no less than 1mg/ml of the cytokine. |
| Stability | ● The lyophilized protein is stable for a few weeks at room temperature, but best stored at -20°C. ● Reconstituted human IL-6 should be stored in working aliquots at -20°C. |
| Usage | ● FOR RESEARCH USE ONLY. NOT FOR HUMAN USE. |

Human 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, 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. IL-6 signals through the IL-6 receptor system that consists of two chains, IL-6R alpha and gp130. Murine IL-6 is inactive on human cells, while both human and murine are equally active on murine cells. Recombinant human IL-6 is a 20.8 kDa protein containing 184 amino acid residues.

Protein Sequence:

VPPGEDSKDVAAPHRQPLTSSERIDKQIRYILDGISALRKETCNKSNMCESSKEALAENNLNLPKMA
EKDGCFFQSGFNEETCLVKIITGLLEFEVYLEYLQNRFFESSEEQARAVQMSTKVLIQFLQKKANLDAIT
TPD PTTNASLLTK LQAQNQWLQD MTTHLILRSF KEFLQSSLRA LRQM