Interleukin-6 human recombinant, expressed in *Escherichia coli* suitable for cell culture

**Catalog Number** I1395
**Storage Temperature** –20 °C

**Synonym:** IL-6

**Product Description**
Interleukin-6 (IL-6) is a multifunctional 26 kDa protein originally discovered in the medium of RNA-stimulated fibroblastoid cells. Interleukin-6 appears to be directly involved in the responses that occur after infection and cellular injury, and it may prove to be as important as IL-1 and TNF-α in regulating the acute phase response. IL-6 is reported to be produced by fibroblasts, activated T cells, activated monocytes or macrophages, and endothelial cells. It acts upon a variety of cells including fibroblasts, myeloid progenitor cells, T cells, B cells, and hepatocytes. Interleukin-6 induces multiple effects as indicated by its numerous synonyms: plasmacytoma growth factor (PCT-GF), interferon β 2 (IFN-β2), monocyte derived human B cell growth factor, B cell stimulating factor (BSF-2), hepatocyte stimulating factor (HSF), and interleukin hybridoma/plasmacytoma-1 (IL-HP1). In addition, IL-6 appears to interact with IL-2 in the proliferation of T lymphocytes. IL-6 potentiates the proliferative effect of IL-3 on multipotential hematopoietic progenitors.

This product is lyophilized from a 0.2 µm filtered solution of phosphate buffered saline (PBS), pH 7.4, containing 500 µg bovine serum albumin (BSA) per vial as a carrier protein.

**Purity:** ≥97% (SDS-PAGE)

The biological activity of IL-6 was tested in culture by measuring its ability to stimulate proliferation of the IL-6 dependent mouse T1165.85.2.1 cells.

The EC₅₀ is defined as the effective concentration of growth factor that elicits a 50% increase in cell growth in a cell based bioassay.

**Precautions and Disclaimer**
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

**Preparation Instructions**
Reconstitute the contents of the vial using endotoxin free water to a concentration of 100 µg/ml. For lower concentrations, the product should be diluted before use in medium containing at least 0.5% protein (i.e., cell culture medium containing 5–10% serum).

**Storage/Stability**
Store the product at –20 °C.

After reconstitution, store at 2–8 °C for a maximum of 3 months. For extended storage, freeze in working aliquots at –20 or –70 °C. Repeated freezing and thawing is not recommended.

**References**