

Growth Factor Data Sheet

GoldBio growth factors are manufactured for **RESEARCH USE ONLY** and cannot be sold for human consumption!

Interleukin-6 (IL6) is encoded by the IL6 gene in humans and acts as both a pro-inflammatory and anti-inflammatory cytokine. It is secreted by T-cells and macrophages to stimulate an immune response. Furthermore, it plays an essential role in the final differentiation of B-cells into Ig-secreting cells, which are involved in lymphocyte and monocyte differentiation. IL6 also induces myeloma and plasmacytoma growth. The human IL6 is a single nonglycosylated polypeptide chain containing 183 amino acids and it signals through a cell-surface type I cytokine receptor complex consisting of the ligand-binding IL6RG chain (CD126), and the signal-transducing component gp130 (also called CD130). The human IL6 is equally active on mouse and rat cells.

Catalog Number	1110-06
Product Name	IL6, Human Recombinant Human Interleukin-6 HuIL6 B-cell Stimulatory factor 2 (BSF2) Hybridoma Growth Factor (HGF)
Source	<i>Escherichia coli</i>
MW	~20.7 kDa (183 amino acids)
Sequence	VPPGEDSKDV AAPHRQPLTS SERIDKQIRY ILDGISALRK ETCNKSNMCE SSKEALAENN LNLPKMAEKD GCFQSGFNEE TCLVKIITGL LEFEVYLEYL QNRFESSEEQ ARAVQMSTKV LIQFLQKKAK NLDAITTPDP TTNASLLTKL QAQNQWLQDM TTHLILRSFK EFLQSSLRAL RQM
Accession Number	P05231
Purity	>96% by SDS-PAGE and HPLC analyses.
Biological Activity	Assay #1: Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using IL-6-dependent murine 7TD1 cells is less than 0.1 ng/ml, corresponding to a specific activity of >1.0 × 10 ⁷ IU/mg. Assay #2: Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using IL-6-dependent murine T1165 cells is less than 0.8 ng/ml, corresponding to a specific activity of >1.25 × 10 ⁷ IU/mg.
Formulation	Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.
Storage/Handling	This lyophilized preparation is stable at 2-8°C, but should be kept at -20°C for long term storage. The reconstituted sample can be apportioned into working aliquots and stored at -80 °C for up to 6 months. Avoid repeated freeze/thaw cycles.
Reconstitution	The sample should be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in a siliconized tube using PBS that contains a 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Reconstituted solutions are stable for up to one week at 2-8°C. Stock solutions should be aliquoted and stored at -80°C. Further dilutions should be made in appropriate buffered solutions containing BSA or serum.