

# Growth Factor Data Sheet

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

Interleukin-6 (IL6) 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, IL6 has diverse biological functions. It stimulates B-cell differentiation and antibody production, synergizes with IL3 in megakaryocyte development and platelet production, induces expression of hepatic acute-phase proteins and regulates bone metabolism. IL6 signals through the IL6 receptor system that consists of two chains: IL6R $\alpha$  and gp130.

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <b>Catalog Number</b>      | <b>1210-06</b>                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Product Name</b>        | <b>IL6, Rhesus macaque</b><br>Recombinant Rhesus macaque Interleukin-6<br>IL6<br>Interferon, Beta-2 (IFNB2)<br>B-cell Stimulatory factor 2 (BSF2)<br>Hybridoma Growth Factor (HGF)                                                                                                                                                                                                                                             |
| <b>Source</b>              | <i>Escherichia coli</i>                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>MW</b>                  | ~21.1 kDa (186 amino acids)                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Sequence</b>            | MAPVLPGEDS KNVAAPHSQP LTSSERIDKH IRYILDGISA LRKETCNRSN MCESSKEALA<br>ENNLNLPKMA EKDGCFQSGF NEDTCLVKII TGLLEFEVYL EYLQNRFESE EQARAVQMS<br>TKVLIQFLQK KAKNLDAITT PEPTNASLL TKLQAQNQWL QDMTTHLILR SFKEFLQSNL<br>RALRQM                                                                                                                                                                                                            |
| <b>Purity</b>              | >97% by SDS-PAGE and HPLC analyses                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Biological Activity</b> | Fully biologically active when compared to standard. The ED <sub>50</sub> 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 $>1.0 \times 10^7$ IU/mg.                                                                                                                                                                         |
| <b>Formulation</b>         | Sterile filtered white lyophilized powder. Purified and tested for use in cell culture.                                                                                                                                                                                                                                                                                                                                        |
| <b>Storage/Handling</b>    | 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.                                                                                                                                                                              |
| <b>Reconstitution</b>      | 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. |