

# Growth Factor Data Sheet

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

Interleukin-11 (IL11) is encoded by the IL11 gene and is a member of IL6 superfamily, which is distinguished based on its use of the common co-receptor gp130. IL11 is a multifunctional cytokine that was first isolated from bone marrow-derived stromal cells. IL11 receptor activation requires the formation of a complex that contains two IL11 molecules, two molecules of the ligand-binding IL11 RF subunit, and two molecules of the expressed cell signaling G-subunit, gp130. The functions of IL11 are that it directly stimulates the proliferation of hematopoietic stem cells and megakaryocyte progenitor cells, and induces megakaryocyte maturation that results in increased platelet production.

<b>Catalog Number</b>	<b>1110-11</b>
<b>Product Name</b>	<b>IL11, Human</b> Recombinant Human Interleukin-11 HuIL11 Megakaryocyte Colony Stimulating Factor (Meg-CSF)
<b>Source</b>	<i>Escherichia coli</i>
<b>MW</b>	~19.1 kDa (179 amino acids)
<b>Sequence</b>	MPGPPPGPPR VSPDPRAELD STVLLTRSLL ADTRQLAAQL RDKFPADGDH NLDSLPTLAM SAGALGALQL PGLVTRLRAD LLSYLRHVQW LRRAGGSSLK TLEPELGTQ ARLDRLLRRL QLLMSRLALP QPPDPAPP LAPPSSAWGG IRAAHAILGG LHLLTDWAVR GLLLLKTRL
<b>Accession Number</b>	<a href="#">P20809</a>
<b>Purity</b>	>95% 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 murine B9-11 cells is less than 1 ng/ml, corresponding to a specific activity of >1.0 × 10 <sup>6</sup> 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.