

Growth Factor Data Sheet

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

Interleukin-9 (IL9) is encoded by the IL9 gene and is produced by T-cells and specifically by CD4+ helper cells. IL9 was originally identified as a cytokine found in the conditioned medium of a human T-cell leukemia virus type I (HTLVI) transformed T-cell line. IL9 functions through the IL-9 receptor, which activates different signal transducer and activator (STAT) proteins and thus connects this cytokine to various biological processes. IL9 can support the growth of IL-2 independent and IL4 independent helper T-cells. Human IL9 has approximately 56% amino acid sequence identity with murine IL9. The gene encoding this cytokine has been identified as a candidate gene for asthma. Genetic studies on a mouse model of asthma demonstrated that this cytokine is a determining factor in the pathogenesis of bronchial hyper responsiveness.

Catalog Number Product Name	1110-09 IL9, Human Recombinant Human Interleukin-9 IL9 T-cell/Mast Cell Growth Factor P40
Source	<i>Escherichia coli</i>
MW	~14.1 kDa (126 amino acids)
Sequence	QGCPFLAGIL DINFLINKMQ EDPASKCHCS ANVTSCCLCG IPSDNCTRPC FSERLSQMTN TTMQTRYPLI
Accession Number	P15248
Purity	>95% by SDS-PAGE and HPLC analyses
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using human MO7e cells is less than 0.2 ng/ml, corresponding to a specific activity of >5.0 × 10 ⁶ 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.