

## **Growth Factor Data Sheet**

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Interleukin-4 (IL4) is a pleiotropic cytokine mainly produced by mast cells, activated T-cells and bone marrow stromal cells. It has many biological roles, including the stimulation of activated B-cell and T-cell proliferation, and the differentiation of CD4+ T-cells into Th2 cells. Additionally, IL4 enhances both the secretion and expression of cell surface IgE and IgG1. IL4 also regulates the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes. The rhesus macaque IL4 shares about 40-45% amino acid sequence identity with human, mouse, and rat IL4 and is species-specific in its activities.

Catalog Number Product Name	1210-04 IL4, Rhesus macaque Recombinant Rhesus macaque Interleukin-4 IL4 B-Cell Stimulatory Factor 1 (BSF1)
Source	Escherichia coli
MW	~15.0 kDa (129 amino acids)
Sequence	HNCHIALREI IETLNSLTEQ KTLCTKLTIT DILAASKNTT EKETFCRAAT VLRQFYSHHE KDTRCLGATA QQFHRHKQLI RFLKRLDRNL WGLAGLNSCP VKEANQSTLE DFLERLKTIM REKYSKCSS
Accession Number	<u>P51492</u>
Purity	>96% 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 TF-1 cells is less than 1.0 ng/ml, corresponding to a specific activity of >1.0 × $10^6$ 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.

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