



## Product Datasheet

<b>Product Name</b>	Recombinant Human Interleukin-4
<b>Cata No</b>	CB500023
<b>Source</b>	Escherichia Coli.
<b>Synonyms</b>	BCGF, BCDF, B cell stimulating factor, BSF-1, Lymphocyte stimulatory factor 1, IL-4, MGC79402, Binetrakin, Pitrakinra.

### Description

Interleukin-4 is a pleiotropic cytokine produced primarily by activated T lymphocytes, basophils and mast cells. Multiple immune response-modulating functions are performed by IL-4 on a variety of cell types and it has an important role in the regulator of isotype switching, induction of IgE production in B lymphocytes and differentiation of precursor T helper cells. IL-4 binds to both membrane-bound and secreted soluble IL-4 receptors.

### Description

Interleukin-4 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 120 amino acids and having a molecular mass of 13500 Dalton.  
The IL-4 is purified by proprietary chromatographic techniques.

### Purity

Greater than 98.0% as determined by:  
(a) Analysis by RP-HPLC.  
(b) Analysis by SDS-PAGE

### Biological Activity

The ED50 as determined by the dose-dependant proliferation of Murine HT-2 cells is < 2 ng/ml, corresponding to a Specific Activity of  $5 \times 10^5$  IU/mg.

### Solubility

It is recommended to reconstitute the lyophilized Interleukin 4 in sterile 18M $\Omega$ -cm H<sub>2</sub>O not less than 100 $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

### Storage

Lyophilized Interleukin-4 although stable at room temperature for 3 weeks, should be stored desiccated below -18 $^{\circ}$ C. Upon reconstitution IL4 should be stored at 4 $^{\circ}$ C between 2-7 days and for future use below -18 $^{\circ}$ C.  
For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).  
Please prevent freeze-thaw cycles.

**\* For Non-Clinical Research Use Only \***