



## Product Datasheet

<b>Product Name</b>	Interleukin-4 Human Recombinant, CHO
<b>Cata No</b>	CB500173
<b>Source</b>	<i>Chinese Hamster Ovarian Cells.</i>
<b>Synonyms</b>	BCGF, BCDF, B cell stimulating factor, BSF-1, Lymphocyte stimulatory factor 1, IL-4, MGC79402, Binetrakin, Pitrakinra.

### Description

IL4 is a pleiotropic cytokine produced by activated T cells. IL4 is a ligand for interleukin 4 receptor. The interleukin 4 receptor also binds to IL13, which may contribute to many overlapping functions of this cytokine and IL13. STAT6, a signal transducer and activator of transcription, has been shown to play a central role in mediating the immune regulatory signal of this cytokine. This gene, IL3, IL5, IL13, and CSF2 form a cytokine gene cluster on chromosome 5q, with this gene particularly close to IL13. IL4, IL13 and IL5 are found to be regulated coordinately by several long-range regulatory elements in an over 120 kilobase range on the chromosome. Two alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. Interleukin-4 Human Recombinant produced in CHO is a single, non-glycosylated polypeptide chain containing 129 amino acids and having a molecular mass of 14 kDa, the glycosylation of IL-4 migrates as 18 kDa on SDS-PAGE. The IL-4 is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Biological Activity

Measured in a cell proliferation assay using TF-1 cells. The ED<sub>50</sub> for this effect is 0.05-0.2 ng/ml.

### Purity

Greater than 97.0% as determined by:  
(a) Analysis by RP-HPLC.  
(b) Analysis by SDS-PAGE.

### Formulation

Lyophilized from a Phosphate- Buffered Saline (pH 7.4).

### Stability

Lyophilized Interleukin-4 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL4 should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

**Please prevent freeze-thaw cycles.**