



## Product Datasheet

<b>Product Name</b>	Recombinant Human Interleukin-5
<b>Cata No</b>	CB500114
<b>Source</b>	<i>Escherichia Coli.</i>
<b>Synonyms</b>	EDF, BCDFII, TRF, T-cell replacing factor, Eosinophil differentiation factor, B cell differentiation factor I, IL-5.

### Description

The protein encoded by this gene is a cytokine that acts as a growth and differentiation factor for both B cells and eosinophils. This cytokine is a main regulator of eosinopoiesis, eosinophil maturation and activation. The elevated production of this cytokine is reported to be related to asthma or hypereosinophilic syndromes. The receptor of this cytokine is a heterodimer, whose beta subunit is shared with the receptors for interleukin 3 (IL3) and colony stimulating factor 2 (CSF2/GM-CSF). This gene, together with those for interleukin 4 (IL4), interleukin 13 (IL13), and CSF2, form a cytokine gene cluster on chromosome 5. This cytokine, IL4, and IL13 are found to be regulated coordinately by long-range regulatory elements spread over 120 kilobases on chromosome 5q31. Interleukin-5 Human Recombinant produced in E.Coli is a dimeric, non-glycosylated polypeptide chain containing 132 amino acids and having a molecular mass of 26522.84 Dalton.

The IL-5 is purified by proprietary chromatographic techniques.

### Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

### Biological Activity

The ED50 as determined by the dose-dependant

stimulation of the proliferation of TF-1 cells was found to be < 0.15ng/ml, corresponding to a Specific Activity of  $6 \times 10^6$  IU/mg.

### Purity

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

### Formulation

Lyophilized from a concentrated (1mg/ml) solution in water containing no additives.

### Reconstitution

It is recommended to reconstitute the lyophilized Interferon-5 in sterile 18MΩ-cm H<sub>2</sub>O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

### Stability

Lyophilized Interleukin-5 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL5 should be stored at 4°C between 2-7 days and for future use below -18°C.

### Sequence

The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ile-Pro-Thr-Glu.

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