

## 32-1408: IL 5 Recombinant Protein

**Alternative Name :** EDF,BCDFII,TRF,T-cell replacing factor,Eosinophil differentiation factor,B cell differentiation factor I,IL-5.

### Description

Source : Escherichia Coli. Interleukin-5 Human Recombinant produced in E.Coli is a dimeric, non-glycosylated polypeptide chain containing two 113 amino acids chains, and having a molecular mass of 26522.84 Dalton. The IL-5 is purified by proprietary chromatographic techniques. 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 interleukine 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.

### Product Info

**Amount :** 10 µg  
**Purification :** Greater than 98.0% as determined by:(a) Analysis by RP-HPLC.(b) Analysis by SDS-PAGE.  
**Content :** Lyophilized from a concentrated (1mg/ml) solution in water containing no additives.  
**Storage condition :** 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.Please avoid freeze thaw cycles.  
**Amino Acid :** The sequence of the first five N-terminal amino acids was determined and was found to be Met-Ile-Pro-Thr-Glu.

### Application Note

It is recommended to reconstitute the lyophilized Interleukin-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. 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 x 10<sup>6</sup> IU/mg.

