



Product Datasheet

Product Name	Interleukin-5 Rat Recombinant
Cata No	CB500289
Source	<i>Escherichia Coli.</i>
Synonyms	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 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.

Interleukin-5 Rat Recombinant produced in E.Coli is a dimeric, non-glycosylated polypeptide chain containing 113 amino acids and having a molecular mass of 13074 Dalton.

The IL-5 is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Biological Activity

The ED50 range=0.3-1.0 ng/ml as determined by the dose-dependant stimulation of the proliferation of BCL-1 cells.

Purity

Greater than 95.0% as determined by:

- (a) Analysis by RP-HPLC.
- (b) Analysis by SDS-PAGE.

Formulation

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

Stability

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

Please avoid freeze thaw cycles.

Sequence

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