

rHuIL-5

Recombinant Human Interleukin-5

Product	Cat#	Package size
Recombinant Human Interleukin-5	C6025.0002	2µg
Recombinant Human Interleukin-5	C6025.0010	10µg
Recombinant Human Interleukin-5	C6025.1000	1mg

Synonyms: EDF, BCDLII, TRF, T-cell replacing factor, Eosinophil differentiation factor, B cell differentiation factor I, IL-5.

Product 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.

Recombinant Human IL-5 produced in *E.coli* is a dimeric, non-glycosylated polypeptide of 113 amino acids each and a total molecular weight of 26,522 Dalton.

Source: *Escherichia coli*

Biological activity

The ED50 as determined by the dose-dependent stimulation of the proliferation of TF-1 cells was found to be <0.15ng/mL, corresponding to a Specific Activity of 6 x 10E6 IU/mg.

Purity: Greater than 98% by SDS-PAGE and HPLC analysis.

Amino acid sequence

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

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

Solubility / Reconstitution

It is recommended to briefly centrifuge the vial prior to opening to bring the contents to the bottom. Reconstitute the lyophilised rHuIL-5 in sterile water not less than 100µg/mL, which can then be further diluted to other aqueous solutions.

Stability

Lyophilised rHuIL-5 although stable at room temperature for 3 weeks, should be stored desiccated at -20°C. Reconstituted rHuIL-5 is best stored refrigerated at +2°C to +8°C between 2-7 days and at -20°C for long term storage. For long term storage it is recommended to add a carrier protein (e.g., 0.1% HSA or BSA).

Please prevent from repeated freeze-thaw cycles.

Usage

This product is for research/laboratory usage only. It may not be used as drug, agricultural or pesticidal product, food additive or household chemical.