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## 32-7043: Recombinant Human Interleukin-4/IL-4 (E. coli)

**Gene ID:** 3565 **Uniprot ID:** P05112

## **Description**

Source: E.coli. MW:15.1kD.

Recombinant Human Interleukin-4 is produced by our E.coli expression system and the target gene encoding His25-Ser153 is expressed. Interleukin-4 (IL-4) is a pleiotropic cytokine that regulates diverse T and B cell responses including cell proliferation, survival and gene expression. IL-4 is produced by mast cells, T cells, and bone marrow stromal cells. IL-4 regulates the differentiation of naive CD4+ T cells into helper Th2 cells, characterized by their cytokine-secretion profile that includes secretion of IL-4, IL-5, IL-6, IL-10, and IL-13, which favor a humoral immune response. Another dominant function of IL-4 is the regulation of immunoglobulin class switching to the IgG1 and IgE isotypes. Excessive IL-4 production by Th2 cells has been associated with elevated IgE production and allergic response.

## **Product Info**

**Amount :**  $10 \mu g / 50 \mu g$ 

Content: Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.4.

Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks.

**Storage condition:** Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted

samples are stable at -20°C for 3 months.

Amino Acid: MHKCDITLQEIIKTLNSLTEQKTLCTELTVTDIFAASKNTTEKETFCRAATVLRQFYSHHEKDTRCLGATAQQFHR

HKQLIRFLKRLDRNLWGLAGLNSCPVKEANQSTLENFLERLKTIMREKYSKCSS

## **Application Note**

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100  $\tilde{A} \Box \hat{A} \mu g/ml$ . Dissolve the lyophilized protein in ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin**: Less than  $0.1 \text{ ng/}\tilde{\mathbb{A}} \| \hat{\mathbb{A}} \mu g$  (1 IEU/ $\tilde{\mathbb{A}} \| \hat{\mathbb{A}} \mu g$ ) as determined by LAL test. **Biological Activity**: ED50 is less than 2 ng/ml. Specific Activity of  $5.0 \times 10^6 \text{ IU/mg}$ .