

## 32-20337: Animal-Free Recombinant Human IL-4(Discontinued)

**Reactivity :** Human, Mouse  
**Alternative Name :** BCGF, BCDF, B cell stimulating factor (BSF-1)

### Description

**Source:** *E.coli* IL-4 is a pleiotropic cytokine that regulates diverse T and B cell responses including cell proliferation, survival and gene expression. 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 allergy. Recombinant Human IL-4 is a 15.1 kDa globular protein containing 130 amino acid residues.

### Product Info

**Amount :** 5 µg / 20 µg  
**Purification :** Purity:  $\geq 98\%$  by SDS-PAGE gel and HPLC analyses.  
**Content :** This recombinant protein is supplied in lyophilized form.  
**Amino Acid :** MHKCDITLQE IIKTLNSLTE QKTLCTELTV TDIFAASKNT TEKETFCRAA TVLRQFYSHH EKDTRCLGAT  
AQQFHRHKQL IRFLKRLDRN LWGLAGLNSC PVKEANQSTL ENFLERLKTI MREKYSKCSS

### Application Note

The  $ED_{50}$  was determined by the dose-dependent stimulation of the proliferation of human TF-1 cells is  $\leq 0.2$  ng/ml, corresponding to a specific activity of  $\geq 5 \times 10^6$  units/mg.