

## Recombinant Rat Interleukin-4 (rr IL-4)

**Interleukin-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 Rat IL-4 produced in *E.Coli* is a single, non-glycosylated, polypeptide chain containing 126 amino acids and having a molecular mass of 14.1 kDa.

<b>Synonyms :</b>	BCGF, BCDF, B cell stimulating factor, BSF-1
<b>Source:</b>	<i>Escherichia coli</i>
<b>AA Sequence:</b>	MHGCNDSPLR EIINTLNQVT EKGTPCTEMF VPDVLTATRN TTENELICRA SRVLRKFYFP RDVPPCLKNK SGVLGELRKL CRGVSGLNLS RSCTVNESTL TTLKDFLESL KSILRGKYLQ SCTSMS
<b>Formulation:</b>	Lyophilisate from a 0.22 µm filtered carrier free solution in in PBS pH 7.1
<b>Reconstitution:</b>	Reconstitute in sterile endotoxin free water not less than 100 µg/ml
<b>Stability:</b>	The lyophilized protein is stable for at least 2 years at -20°C. Reconstituted rr IL-4 is stable for at least 3 months when stored in concentrated working aliquots (100 ng/µl or higher) at -20°C. Avoid repeated freeze/thaw cycles.
<b>Biological Activity:</b>	tested by its ability to induce rat IL-4R induced STAT activation in transfected Ba/F3 cells.
<b>Purity:</b>	95% (verified by SDS-PAGE / silver stain)
<b>Endotoxicity:</b>	The endotoxin level is less than 0.1 ng per µg (1EU/µg) determined by LAL method
<b>Order N°:</b>	rr IL-4+Size available sizes: 2 µg, 10 µg, 50 µg

This material is offered for **research only**. Not for use in human. For in vitro use only. EuroBioSciences will not be held responsible for patent infringement or other violations that may occur with the use of our products.