

IL4

Recombinant Rat IL-4

Catalog No.	CRI148A CRI148B CRI148C	Quantity:	5 µg 20 µg 1.0 mg
Alternate Names:	interleukin-4, BCGF-1, B cell growth factor 1, BSF-1, B-cell stimulatory factor 1		
Description:	<p>Interleukin-4 (IL-4) is a pleiotropic cytokine that induces differentiation of naive helper T cells (Th0 cells) to Th2 cells and produced by mast cells, activated T cells and bone marrow stromal cells. It has many biological roles, including the stimulation of activated B-cell and T-cell proliferation, and the differentiation of CD4+ T-cells into Th2 cells. IL-4 can enhance both secretion and cell surface expression of IgE and IgG1 and also regulates the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes. The rat IL-4 shares about 40% ~ 45% a.a. sequence identity with human, mouse, rhesus macaque IL-4 and they are species-specific in their activities.</p> <p>Recombinant Rat IL-4 is a single non-glycosylated polypeptide chain containing 125 amino acids.</p>		
Gene ID:	287287		
Source:	<i>E. coli</i>		
Molecular Weight:	14.0 kDa		
Formulation:	Lyophilized from a 0.2 µm filtered solution in PBS, pH 7.4, + 5% trehalose.		
Purity:	> 95% by SDS-PAGE and HPLC analyses.		
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using rat splenocytes is less than 1.0 ng/ml.		
Specific Activity:	>1.0 × 10 ⁶ IU/mg.		
Amino Acid Sequence:	HGCNDSPLRE IINTLNQVTE KGTPCTEMFV PDVLTATRNT TENELICRAS RVLRFYFPR DVPPCLKNKS GVLGELRKLC RGVSGLSLR SCTVNESTLT TLKDFLES�K SILRGKYLQS CTSMS		
Reconstitution:	Centrifuge vial prior to opening. Add sterile distilled water or aqueous buffer to a concentration of 0.1-1.0 mg/ml. Further dilutions should be made in appropriate buffered solutions.		
Storage & Stability:	The lyophilized protein is stable at 2-8°C. Upon receipt, store desiccated at -20°C. After reconstitution, the preparation is stable for up to one week at 2-8°C. For maximal stability, apportion the reconstituted preparation into working aliquots and store at -20°C to -80°C. For long term storage of reconstituted protein, it is recommended that a carrier protein such as 0.1% BSA or HSA be added. This depends on the particular application. Avoid repeated freeze/thaw cycles.		

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