

## IL7

### Recombinant Rat IL-7

<b>Catalog No.</b>	CRI193A CRI193B CRI193C	<b>Quantity:</b>	2 µg 10 µg 1 mg
<b>Alternate Names:</b>	Interleukin-7		
<b>Description:</b>	<p>Interleukin-7 (IL-7) is encoded by the IL7 gene and secreted by stromal cells in the red marrow and thymus. It binds to the IL-7 receptor, a heterodimer consisting of IL-7 receptor alpha and IL-2 receptor gamma chain. IL-7 stimulates the differentiation of hematopoietic stem cells into lymphoid progenitor cells and also stimulates proliferation of B cells, T cells, and NK cells. Furthermore, IL-7 as an immunotherapy agent has been examined in many human clinical trials for various malignancies and during HIV infection. Rat IL-7 contains 129 amino acid residues and has three disulfide bonds. In addition, it has approximately 57% and 88% amino acid sequence identity with human and murine IL-7.</p> <p>Recombinant Rat IL-7 is a single non-glycosylated polypeptide chain containing 129 amino acids.</p>		
<b>Gene ID:</b>	25647		
<b>Source:</b>	<i>E. coli</i>		
<b>Molecular Weight:</b>	14.9 kDa		
<b>Formulation:</b>	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.		
<b>Purity:</b>	>95% as determined by SDS-PAGE and HPLC analyses		
<b>Endotoxin Level:</b>	<1 EU/µg as determined by LAL method.		
<b>Biological Activity:</b>	Fully biologically active when compared to standard. The ED <sub>50</sub> as determined by a cell proliferation assay using murine 2E8 cells is less than 2.0 ng/ml.		
<b>Specific Activity:</b>	> 5 x 10 <sup>5</sup> IU/mg		
<b>Amino Acid Sequence:</b>	DCHIKDKDGK AFGSVLMISI NQLDKMTGTD SDCPNNEPNF FKKHLCDDTK EAAFLNRAAR KLRQFLKMNI SEEFNDHLLR VSDGTQTLVN CTSKEEKTIK EQKKNPCFL KRLLEIKTC WNKILKGS		
<b>Reconstitution:</b>	<b>Centrifuge vial prior to opening.</b> 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.		
<b>Storage &amp; Stability:</b>	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. <b>Avoid repeated freeze/thaw cycles.</b>		

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