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#73786**Human IL-7 Recombinant Protein**

10 µg


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MW (kDa):	UniProt ID:	Entrez-Gene Id:
17	#P13232	3574
<b>Background</b>		
IL-7 plays a key role in lymphopoiesis and lymphoid homeostasis (1). Stromal and epithelial cells within the bone marrow and thymus produce IL-7 (1). The primary targets of IL-7 are T cells, B cells, and dendritic cells (1). IL-7 is crucial for T cell development, the importance of which is underscored by the lack of T cells in both mice and humans that are deficient in IL-7/IL-7R signaling (1,2). While IL-7 appears to be required for B cell development in mice, the role of IL-7 in human B cell development is unclear (1,3). In addition to its effects on T cell lymphopoiesis, IL-7 promotes the maintenance and survival of naïve and memory αβ T cells, as well as γδ T cells (1). The IL-7 receptor is a heterodimer of the common γ chain, γc, and the IL-7-specific IL-7Rα (1). IL-7 activates PI3K/Akt, Jak1/2, and Stat1/3/5 (1).		
<b>Endotoxin</b>		
Endotoxin levels are less than or equal to 1 EU / 1 µg hIL-7.		
<b>Purity</b>		
A greater than or equal to 95% purity was determined by SDS-PAGE.		
<b>Source / Purification</b>		
Recombinant human IL-7 was expressed in <i>E. coli</i> and is supplied in a lyophilized form.		
<b>Bioactivity</b>		
The bioactivity of recombinant hIL-7 was determined in a 2E8 cell proliferation assay. The ED <sub>50</sub> of each lot is less than or equal to 1 ng/ml.		
<b>Background References</b>		
1. Rochman, Y. et al. (2009) <i>Nat Rev Immunol</i> 9, 480-90. 2. Ma, A. et al. (2006) <i>Annu Rev Immunol</i> 24, 657-79. 3. Parrish, Y.K. et al. (2009) <i>J Immunol</i> 182, 4255-66.		

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