

Recombinant Human Interleukin-7

Catalog No:	CRI108C	Size:	1.0 mg
Lot Number:	7791-01S		
Molecular Weight:	17.4 kDa, 152 amino acid residues		
Purity:	>98% as determined by SDS-PAGE and N-terminal sequence analyses.		
Biological Activity:	ED ₅₀ ≤0.5 ng/mL (≥2 x 10 ⁶ units/mg). The biological activity is determined by measuring the dose dependent stimulation of IXN/2B cell proliferation. A concentration range of 0.1 to 10.0 ng/mL is effective for most <i>in vitro</i> applications. The optimal concentration should be determined for each specific application.		
Formulation:	Lyophilized, carrier-free		
Sterility:	Filtered prior to lyophilization through a 0.22 micron sterile filter.		
Endotoxin:	<0.1 ng/μg		
Source:	Recombinant human IL-7 is produced in <i>E. coli</i> and purified via sequential chromatography.		
Reconstitution:	We recommend that the vial be briefly centrifuged prior to opening to bring the contents to the bottom. Lyophilized hIL-7 may be reconstituted in PBS, H ₂ O, or other appropriate buffered solution to 0.1-1.0 mg/mL. These stock solutions should be apportioned into working aliquots and stored at ≤-20°C. Further dilution should be made in medium or buffered solution containing carrier protein, such as PBS with 0.1% BSA. (hIL-7 is supplied lyophilized and carrier-free for maximum flexibility in use; however, it is suggested that carrier protein be added to all reconstituted hIL-7 dilutions to ensure no loss in activity.)		
Storage:	Lyophilized hIL-7 should be stored at ≤+4°C, preferably desiccated. Store reconstituted hIL-7 at ≤-20°C. Keep freeze-thaw cycles to a minimum.		
Stability:	When stored properly, hIL-7 is stable for greater than one year lyophilized and greater than 3 months reconstituted.		
References:	Ayyoub, M., S. Stevanovic, U. Sahin, P. Guillaume, C. Servis, D. Rimoldi, D. Valmori, P. Romero, J.C. Cerottini, H.G. Rammensee, M. Pfreundschuh, D. Speiser, and F. Levy (2002) Proteasome-assisted identification of a SSX-2-derived epitope recognized by tumor-reactive CTL infiltrating metastatic melanoma. <i>J. Immunol.</i> 168(4):1717-1722. Butterfield, L.H., S.M. Jilani, N.G. Chakraborty, L.A. Bui, A. Ribas, V.B. Disette, R. Lau, S.C. Gamradt, J.A. Glaspy, W.H. McBride, B. Mukherji and J.S. Economou (1998) Generation of melanoma-specific cytotoxic T lymphocytes by dendritic cells transduced with a MART-1 adenovirus. <i>J. Immunol.</i> 161(10):5607-5613. Cosenza, L., E. Sweeny, and J.R. Murphy (1997) Disulfide bond assignment in human interleukin-7 by matrix-assisted laser desorption/ionization mass spectroscopy and site-directed cysteine to serine mutational analysis. <i>J. Biol. Chem.</i> 272(52):32995-33000.		



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