



**Cell Therapy Systems
Recombinant Human
Interleukin-2 CTS™
(IL-2)**

PRODUCT ANALYSIS SHEET

Catalog Number:	CTP0021	CTP0023
Quantity:	100 µg	1 mg
Lot Number:	See product label	
Molecular Weight:	15.5 kDa	
Purity:	>95% as determined by SDS-PAGE analysis.	
Biological Activity:	ED ₅₀ range = 0.08-0.5 ng/mL, determined by the dose dependent proliferation of mouse CTLL-2 cells. Optimal concentration for individual application should be determined by a dose response assay.	
Formulation:	Lyophilized, carrier free.	
Sterility:	Filtered prior to lyophilization through a 0.22 micron sterile filter.	
Endotoxin:	<0.1 ng/µg	
Production:	Recombinant human IL-2 is produced in <i>E. coli</i> and purified via gel filtration chromatography.	
Reconstitution Recommendation:	We recommend that the vial be briefly centrifuged prior to opening to bring the contents to the bottom. Lyophilized hIL-2 should be reconstituted in 100 mM acetic acid to 0.1-1.0 mg/mL to regain full activity. These stock solutions should be apportioned into working aliquots and stored at ≤-20°C. Further dilutions should be made in low endotoxin medium or buffered solution with FBS or tissue culture grade BSA. It is recommended that all culture media containing supplements, such as growth factor, be sterile filtered prior to use for cell, gene, or tissue-based applications to minimize risk of contamination.	
Suggested Working Dilutions:	The optimal concentration should be determined for each specific application.	
Storage:	Lyophilized hIL-2 should be stored at 2-8°C, preferably desiccated. Store reconstituted hIL-2 at ≤-20°C (not in a frost-free freezer). Keep freeze-thaw cycles to a minimum.	
Expiration Date:	Expires one year from date of receipt when stored as instructed.	
References:	Blumenthal, R.L., D.E. Campbell, P. Hwang, R.H. DeKruyff, L.R. Frankel, and D.T. Umetsu (2001) Human alveolar macrophages induce functional inactivation in antigen-specific CD4 T cells. <i>J. Allergy Clin. Immunol.</i> 107(2):258-264. Camporeale, G. and J. Zempleni (2003) Oxidative folding of interleukin-2 is impaired in flavin-deficient Jurkat cells, causing intracellular accumulation of interleukin-2 and increased expression of stress response genes. <i>Journal of Nutrition</i> 133(3):668-672. Chen, M., B. Gran, K. Costello, K. Johnson, R. Martin, and S. Dhib-Jalbut (2001) Glatiramer acetate induces a Th2-biased response and crossreactivity with myelin basic protein in patients with MS. <i>Multiple Sclerosis</i> 7(4):209-219. Cochran, J.R., T.O. Cameron, J.D. Stone, J.B. Lubetsky, and L.J. Stern (2001) Receptor proximity, not intermolecular orientation is critical for triggering T-cell activation. <i>J. Biol. Chem.</i> 276(30):28068-28074.	

For Research Use or Non-Commercial Manufacturing of Cell Based Products for Clinical Research.

CAUTION: Not intended for direct administration into humans or animals

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Manufactured under ISO 13485 Quality Standard

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For technical support or support related to CTS™ products, www.invitrogen.com/celltherapysupport

PICTS-Hu IL-2

(Rev 07/10) DCC-10-1460

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Explanation of symbols

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		In vitro diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

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