



# Cell Therapy Systems Recombinant Human Interleukin 4 CTS™ (IL-4)

## PRODUCT ANALYSIS SHEET

<b>Catalog Number:</b>	CTP0041	CTP0043
<b>Quantity:</b>	100 µg	1 mg
<b>Lot Number:</b>	See product label	
<b>Molecular Weight:</b>	14.9 kDa	
<b>Purity:</b>	>95% as determined by SDS-PAGE analysis.	
<b>Amino Acid Sequence:</b>	HKCDITLQEI IKTLNSLTEQ KTLCTELTVT DIFAASKNTT EKETFCRAAT VLRQFYSHHE KDTRCLGATA QQFHRHKQLI RFLKRLDRNL WGLAGLNSCP VKEANQSTLE NFLERLKTIM REKYSKCSS	
<b>Biological Activity:</b>	ED <sub>50</sub> = 0.05 to 0.4 ng/mL (Specific Activity: 2.0 x 10 <sup>7</sup> to 2.5 x 10 <sup>6</sup> units/mg). The biological activity is determined by measuring the dose-dependent proliferation of human TF-1 cells. A concentration range of 0.1 to 10.0 ng/mL is effective for most <i>in vitro</i> applications.	
<b>Formulation:</b>	Lyophilized, carrier free.	
<b>Sterility:</b>	Filtered through a 0.22 micron sterile filter.	
<b>Endotoxin:</b>	<0.1 ng/µg	
<b>Production:</b>	Recombinant human IL-4 is produced in <i>E. coli</i> and purified via sequential chromatography.	
<b>Reconstitution Recommendation:</b>	We recommend that the vial be briefly centrifuged prior to opening to bring the contents to the bottom. Lyophilized human IL-4 may be reconstituted in sterile deionized H <sub>2</sub> O 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 dilution should be made in low endotoxin medium or buffered solution with FCS 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.	
<b>Suggested Working Dilutions:</b>	The optimal concentration should be determined for each specific application.	
<b>Storage:</b>	Lyophilized human IL-4 should be stored at 2 to 8°C, preferably desiccated. Store reconstituted human IL-4 at ≤ -20°C (not in a frost-free freezer). Keep freeze-thaw cycles to a minimum.	
<b>Expiration Date:</b>	Expires one year from date of receipt when stored as instructed.	

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

CAUTION: Not intended for direct administration into humans or animals [www.invitrogen.com](http://www.invitrogen.com)

Manufactured under ISO 13485 Quality Standard

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For technical support or support related to CTS™ products, [www.invitrogen.com/celltherapysupport](http://www.invitrogen.com/celltherapysupport)

PICTS-Hu IL-4

(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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