



Certificate of Analysis

Cell Therapy Systems Recombinant Human GM-CSF CTS™

Catalog Number: CTP2011
Quantity: 100 µg
Lot Number: 832758

Storage Temperature: 2-8°C
Expiration Date: 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

Manufactured under ISO13485 Quality Standard.

Format: Lyophilized

Filtration: Filtered prior to lyophilization through a 0.22 µm sterile filter.

Carrier: Carrier Free

TEST	SPECIFICATION	RESULT	UNITS
¹ Biological Activity	ED ₅₀ = <0.1 ng/ml	0.055	ng/mL
² Endotoxin Testing	< 0.1 ng/µg	0.012	ng/µg
³ Purity	> 95%	>95	%

Quality Department

Date: 02-September-2010

REFERENCES:

1. Determined by Proliferation of TF-1 Cells
2. Determined by a quantitative endotoxin test using Limulus Amebocyte Lysate(LAL) as the detecting agent.
3. Determined by SDS-PAGE

For detailed information on our test methodologies, or for further support related to CTS™ products, please visit us at: www.invitrogen.com/celltherapysupport or contact our technical support team at: celltherapysupport@lifetech.com.