

## **CERTIFICATE OF ANALYSIS**

## **Product Information**

Product Name:	GM-CSF, Human(CHO-expressed)	
Cat. No.:	Z02983-10; Z02983-50; Z02983-1	
Lot No.:	B60101507	
Size:	10 μg/vial; 50 μg/vial; 1 mg/vial	
Storage Condition:	Lyophilized recombinant Human GM-CSF remains stable up to 8 months at lower than -70°C from date of receipt. Upon reconstitution, rhGM-CSF should be stable up to 1 week at 4° C or up to 2 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.	

## Quality Control

Test Items	Specifications	Results
Physical Appearance	White Freeze-dried Powder	Conformed
Purity (SDS-PAGE)	> 95%	Conformed
Biological Activity (ED50)	< 0.2 ng/ml	Conformed
Molecular Weight	22-28kDa	Conformed
Bacterial Endotoxin	< 0.2 EU/µg	Conformed

## Caution:

For laboratory use only. Not for household use. If you have any questions about the Certificate of Analysis, please contact our customer service representative at 1-877-436-7274 (Toll-Free), or 1-732-885-9188.

- 860 Centennial Ave., Piscataway, NJ 08854, USA -

Joe Dang Certified by: Date: 07/24/2015

**Protein Products Department**