

## CERTIFICATE OF ANALYSIS

### Product Information

Product Name: Granulocyte Colony Stimulating Factor (G-CSF), Human

Cat. No.: Z02980-10; Z02980-50; Z02980-1

Lot No.: B60031805

Size: 10 µg/vial; 50 µg/vial; 1mg/vial

Storage Condition: Lyophilized recombinant Human G-CSF remains stable up to 6 months at lower than -70°C from date of receipt. Upon reconstitution, rhG-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&HPLC)	> 95%	98.8%
Biological Activity(ED <sub>50</sub> )	< 0.1 ng/ml	0.05 ng/ml
Molecular Weight	18.7 kDa	Conformed
Bacterial Endotoxin	< 0.2 EU/µg	0.10 EU/µg

### 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.

Certified by: zh.cui Date: 06/12/2018  
Protein Products Department