

Version 1.1

Update: 12/27/2019

## CERTIFICATE OF ANALYSIS

### Product Information

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Product Name:	GM-CSF, Human
Cat. No.:	Z02695
Lot No.:	E2102003
Storage Condition:	Lyophilized recombinant human Granulocyte Macrophage Colony Stimulating Factor (rhGM-CSF) remains stable up to 12 months at lower than -70°C from date of receipt. Upon reconstitution, rhGM-CSF should be stable up to 4 weeks at 4°C or up to 6 months at -20°C.

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### Quality Results

Test Items	Specifications	Results
Physical Appearance	White Freeze-dried Powder	Conformed
Purity (SDS-PAGE)	> 95%	Conformed
Biological Activity(ED <sub>50</sub> )	< 0.5 ng/mL	Conformed
Molecular Weight	14 kDa	Conformed
Bacterial Endotoxin	< 1 EU/μg	Conformed

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### 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: *Dandan Yao*

Date: 03/09/2021

### Quality Department

*For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.*