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**Certificate of Analysis**

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Product Name: GM-CSF (17-31)  
Cat. No.: GA21920  
Batch No.: 1  
Chemical Name:

**PHYSICAL AND CHEMICAL PROPERTIES**

Cas. No.: 313219-94-2  
Molecular Formula:  $C_{73}H_{129}N_{27}O_{24}$   
Molecular Weight: 1769  
Storage: Store at -20°C  
Chemical Structure:

**ANALYTICAL DATA**

Appearance: solid  
HNMR: Consistent with structure  
HPLC: Consistent with structure  
Purity: >98%  
Conclusion: The product has been tested and complies with the given specifications.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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