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## Certificate of Analysis

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Product Name: Acetyl- $\beta$ -Endorphin (human)  
Cat. No.: GA20555  
Batch No.: 1  
Chemical Name:

### PHYSICAL AND CHEMICAL PROPERTIES

Cas. No.: 80102-04-1  
Molecular Formula:  $C_{160}H_{253}N_{39}O_{47}S$   
Molecular Weight: 3507.07  
Storage: Store at  $-20^{\circ}C$   
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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